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THESIS

**ENHANCING UNITY OF EFFORT IN
HOMELAND DEFENSE, HOMELAND SECURITY,
AND CIVIL SUPPORT THROUGH
INTERDISCIPLINARY EDUCATION**

by

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March 2010

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HOMELAND SECURITY, AND CIVIL SUPPORT THROUGH
INTERDISCIPLINARY EDUCATION**

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ABSTRACT

Whether in prevention of or response to a natural disaster or act of terrorism, overseas or on American soil, unity of effort among multi-disciplinary and multi-jurisdictional operations is essential. Unity of effort goes beyond cooperation or teamwork to include the concepts of communication using a commonly accepted language; understanding roles, missions, authorities, responsibilities, capabilities, and gaps; information sharing; interoperability; and relationship building and collaboration. This thesis highlights the importance of unity of effort, its challenges, and the contributions of interdisciplinary education to building collaborative capacity in meta-discipline environments.

The intricacies of homeland defense, homeland security, and civil support necessitate the adaptation of military and national security professional education to incorporate interdisciplinary concepts. The shared learning environments present in the health care meta-discipline are explored for correlations to interdisciplinary homeland defense and security education. The Center for Homeland Defense and Security program is examined to identify contributions of interdisciplinary education to enhancing unity of effort among homeland defense and homeland security stakeholders.

By integrating a variety of strategies and reports, this research serves to acknowledge the collaborative capacity built via multi-jurisdictional, interdisciplinary education as a method to enhance unity of effort and build a cadre of military and national security professionals.

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I. INTRODUCTION

A. PROBLEM STATEMENT

Within the United States, no entity has the authority and capability to single-handedly address the preparation for, prevention of, response to, or recovery from a multi-jurisdictional natural or man-made disaster. Natural disasters such as hurricanes, wildfires, and terrorist attacks do not recognize geographical or jurisdictional boundaries, increasing challenges to both preparation and response. Yet, our country continually struggles with planning for and responding to multi-jurisdictional and multi-disciplinary incidents in a synchronized manner, demonstrating the essence of unity of effort.

As discussed in the 2010 *Quadrennial Homeland Security Review (QHSR) Report*, by their very nature, disasters occur locally, but resident capabilities can easily become overwhelmed or reach a point of culmination in events of significant magnitude. In such a situation, a unified effort is required to ensure rapid, integrated response designed to save lives, protect property, and prevent or mitigate suffering.

Lacking an omnipotent organization within the United States for homeland defense and homeland security missions, it takes a whole-of-society approach involving local, state, and federal governments, private and public sectors, non-governmental agencies, and individual citizens to adequately meet the needs of the country. The intent of this research is to explore a plethora of policy documents and commentary by military and civilian leadership advocating unity of effort in interagency activities and the establishment of a cadre of national security experts. This thesis will highlight the importance of unity of effort, its challenges, and the contributions of interdisciplinary education to building collaborative capacity in meta-discipline environments.

The QHSR describes homeland security as a “national enterprise” portraying the community effort involving multiple stakeholders with varied roles and responsibilities associated with the safety and security of America and its population. “The term “enterprise” refers to the collective efforts and shared responsibilities of federal, state,

local, tribal, territorial, nongovernmental, and private-sector partners—as well as individuals, families, and communities—to maintain critical homeland security capabilities.” (February 2010, pp. viii–ix)

The Quadrennial Defense Review Report echoes the need for interagency integration and addresses the benefits of the National Security Professional as one solution to address the “enterprise” needs, asserting:

Finally, the Department of Defense will continue to advocate for an improved interagency strategic planning process that makes optimal use of all national instruments of statecraft. The complexity of 21st century conflicts demands that the U.S. government significantly improve interagency comprehensive assessments, analysis, planning, and execution for whole-of-government operations, including systems to monitor and evaluate those operations in order to advance U.S. national interests. One solution is to allocate additional resources across the government and fully implement the National Security Professional (NSP) program to improve cross-agency training, education, and professional experience opportunities. This will help foster a common approach to strategic and operational planning and implementation, improving prospects for success in future contingencies. (QDR, 2010, p. 70)

Coordination, collaboration, communication, and cooperation are all necessary to achieve unity of effort in preparedness, prevention, response, and recovery. There is a preponderance of literature and testimony on the need for unity of effort, but this thesis identifies examples of how difficult it is to attain particular elements of unity of effort in the homeland defense and security environment.

The complex nature of homeland defense, homeland security, and civil support (an overarching term used to describe DoD support to U.S. civil authorities for domestic emergencies, designated law enforcement activities, and other assignments) operations creates challenges and opportunities that necessitate interdisciplinary education for military and homeland security professionals.

B. RESEARCH QUESTIONS

1. Why do the homeland defense and homeland security communities struggle with unity of effort?
2. How can interdisciplinary education enhance unity of effort in homeland defense, homeland security, and civil support?
3. How can interdisciplinary, multi-jurisdictional education advance national security professional development by developing a cadre of military and civilian experts?

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II. LITERATURE REVIEW

A. INTRODUCTION

In the increasingly complex and dynamic world that we foresee, the Department of Defense and its armed services alone cannot preserve U.S. interests. Defense is but one element of a broader national security structure. If we are to be successful in meeting the challenges of the future, the entire U.S. national security apparatus must adapt to become more integrated, coherent, and proactive.

— *Transforming Defense, National Security in the 21st Century*, Report of the National Defense Panel, December 1997 (pp. vii, 87)

The National Defense Panel Report, *Transforming Defense, National Security in the 21st Century*, was prophetic in both the above conclusion and the statement, “No defense will ever be so effective that determined adversaries, such as terrorists bent on making a political statement, will not be able to penetrate it in some fashion.” (National Defense Panel, 1997, p. 26)

The events of September 11, 2001 exemplify the tragic reality that no security system is perfect. However, collaborative integration of the elements of national power, as well as increased involvement of local, tribal, state, and international jurisdictions, and the American citizenry, have allowed the “homeland security enterprise” to successfully thwart additional terrorists attacks here and abroad.

Still, more work remains for the multitude of professionals charged with maintaining the safety and security of America and its interests. As will be identified through this research, there are both enablers and barriers to unity of effort within the homeland environment. However, shared learning environments can foster building collaborative capacity, and interdisciplinary education of dedicated professionals can enhance unity of effort to address a variety of homeland defense and security challenges.

The diversity of “enterprise” stakeholders is both an asset and a challenge when dealing with the complexity of homeland defense and homeland security, especially when

entities display limited consideration for the integration required when planning for or responding to a multi-disciplinary situation. A Center for Strategic and International Studies Beyond Goldwater-Nichols report titled *Managing the Next Domestic Catastrophe Ready (or Not)?* stated,

Stovepiped career tracks are unacceptable, given that the success of the nation's homeland security programs vitally depends on the ability of individuals to work together cooperatively and effectively across a very broad span of subject matters, skill sets, and institutions. (Wormuth & Witkowsky, 2008, p. 76)

Among other subjects, this literature review identifies the value of the principle of unity of effort. Military principles of war, derived from the writings of Carl von Clausewitz, include unity of command. Army Field Manual 3-0 stresses "For every objective, seek unity of command and unity of effort." Unity of command means that one individual has authority and responsibility for all forces. It is difficult, if not impossible, to accomplish unity of command in homeland defense or homeland security based upon the multi-jurisdictional and multi-disciplinary nature of terrorist attacks or natural disasters.

Unity of effort has been repeatedly identified as a more realistic pursuit for all stakeholders involved in homeland defense, homeland security, or civil support. In testifying before the Senate Committee on Homeland Security and Governmental Affairs, *Hurricane Katrina: The Defense Department's Role in the Response*, Assistant Secretary of Defense for Homeland Defense and America's Security Affairs, Secretary Paul McHale advised, "So we start any domestic mission with a breach in that principle of unity of command. ...though we could not immediately achieve ...unity of command, we could achieve unity of effort." (McHale, 2006, pp. 13–14) During the same Senate hearing, the Chief of the National Guard Bureau, Lieutenant General H. Steven Blum, stated, "Unity of command does not guarantee unity of effort. Unity of effort guarantees success, and I think we achieved that." (Blum, 2006, p. 12)

Joint Vision 2020 accurately summarized the difficulties and importance of a cohesive team for homeland defense and security:

The primary challenge of interagency operations is to achieve unity of effort despite the diverse cultures, competing interests, and differing priorities of the participating organizations, many of whom guard their relative independence, freedom of action, and impartiality. These factors are important in all aspects of interagency operations, but particularly in the context of direct threats to citizens and facilities in the U.S. homeland. Cohesive interagency action is vital to deterring, defending against, and responding to such attacks. The joint force must be prepared to support civilian authorities in a fully integrated effort to meet the needs of U.S. citizens and accomplish the objectives specified by the National Command Authorities. (CJCS, 2000, p. 18)

Military involvement in homeland operations has increased over the course of the last decade, and the crosscutting principle of unity of effort is applicable to a variety of homeland defense and homeland security scenarios. Even within military channels, particularly between USNORTHCOM and the National Guard Bureau, the Department of Defense (DoD) needed to work to improve unity of effort. Now, there is strong advocacy by DoD senior leadership to form a new “jointness” to include interagency partners.

In addition to the importance of unity of effort, requirements for homeland security professional education and the need for interdisciplinary homeland defense and security education are widely publicized. One monograph by Lieutenant Commander Robert Smith, *Interagency Operations: Coordination through Education*, “concludes that a professional education system can improve interagency coordination through a shared learning experience.” (Smith, 2001, p. ii) He advocates development of an interagency curriculum patterned after the DoD’s Joint Professional Military Education program to support the theory that “An established professional education system improves interagency coordination and cooperation.” (Smith, 2001, p. 3)

While Smith’s recommendations have merit, they are incomplete for homeland defense and security considerations as they focus strictly at the federal level of interaction and fail to account for the importance of state, local, and private contributions. As addressed throughout this document, education must be interdisciplinary and multi-jurisdictional to meet the needs of homeland defense and security stakeholders.

The Homeland Security and Defense Education Consortium Association evolved to advance the concepts of homeland defense and homeland security education. From the association's Web site www.hsdeca.org, HSDECA is described as

a network of teaching and research institutions, homeland security, homeland defense, civil security, civil support, and registered volunteer organizations focused on promoting education, research, and cooperation related to and supporting the homeland security (HS) and homeland defense (HD) mission.

This network addresses a niche community, but could benefit from education methods applied in other professional disciplines.

For example, the health care profession's shared learning environment is explored as a multi-disciplinary approach to improving patient care. Educating doctors, nurses, and pharmacists together facilitates a more comprehensive approach to medicine. Correlations between the health care community's approach to education and its applicability to the evolving homeland defense and security discipline will be explored through this research.

The premier educational example of interdisciplinary homeland defense and security education is the Center for Homeland Defense and Security (CHDS) program at the Naval Postgraduate School. The CHDS experience will be examined to identify contributions of interdisciplinary education to enhancing unity of effort among homeland defense and homeland security stakeholders.

DoD doctrine, national strategies, Presidential guidance, think tank inputs, and writings from academic sources are analyzed via this literature review. Material was gathered and analyzed as it applied to unity of effort; military roles in the homeland; expansion of jointness to include interagency partners; the need for interdisciplinary education for military personnel and homeland security professionals; and studies of shared learning environments.

B. UNITY OF EFFORT

Unity of effort has been defined by the Department of Defense (DoD) as

Coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization—the product of successful unified action. (Joint Publication 1-02, *DoD Dictionary of Military and Associated Terms*, 12 April 2001, as amended through 19 August 2009)

In a Newsweek article written in the aftermath of the January 12, 2010, earthquake in Haiti, President Obama “ordered a swift, coordinated, and aggressive effort to save lives in Haiti.” The President wrote,

We are mobilizing every element of our national capacity: the resources of development agencies, the strength of our armed forces, and most important, the compassion of the American people. (Obama, 2010)

President Obama’s direction underlies the essence of cooperation and collaboration in the face of tragedy and is equally applicable to how the United States should respond to a domestic disaster.

Complex Emergencies: Under New Management by Mark Walsh and Michael Harwood reiterates the importance of developing and integrating all elements of national power to address complex operations:

Incomplete or failed integration of non-DoD agencies into the development of strategy and plans for responding to complex emergencies can undermine unity of effort in execution. It can also result in demands for the military to perform tasks outside its range of skills and competencies. Deficiencies in the interagency process could extend the military's involvement in an intervention beyond the need for unique military personnel and assets to cope with the complex emergency. (Walsh & Harwood, 1998, p. 44)

Whether in prevention of or response to a natural disaster or act of terrorism, overseas or on American soil, unity of effort among multi-disciplinary and multi-jurisdictional operations is essential. Unity of effort goes beyond cooperation or teamwork to include the concepts of communication using a commonly accepted

language; understanding roles, missions, authorities, responsibilities, capabilities, and gaps; information sharing; interoperability; and relationship building and collaboration.

C. MILITARY ROLES IN HOMELAND DEFENSE AND CIVIL SUPPORT

Roles and missions of militaries around the globe have changed in the post-Cold War environment; uses of the United States military are no exception. While not a new practice, the participation of the military in responses to natural and man-made disasters has increased significantly over the past two decades. Homeland defense and civil support are among the six Core Mission Areas for U.S. military forces established by the 2009 *Quadrennial Roles and Missions Review (QRMR) Report*, acknowledging the Department of Defense has unique capabilities to assist local, state, and federal authorities with mitigating and managing the consequences of disasters. (QRMR, 2009, p. 5)

Additionally, the QRMR lays out a Department of Defense vision for interagency opportunities:

...the Department will continue to work with its interagency partners to plan, organize, train, and employ integrated, mutually supporting capabilities to achieve unified action at home and abroad. An essential element of this vision is establishing a coherent framework for developing whole-of-government approaches for addressing national security challenges. A framework that includes commonly understood strategic concepts, operational principles, relationships between agencies, and roles and responsibilities would help delineate how to best coordinate and synchronize efforts as well as transition between military-led and civilian-led activities during operations. (QRMR, 2009, p. 31)

The 2007 National Strategy for Homeland Security recognizes the need for military involvement in homeland defense and security:

Our Nation's armed forces are crucial partners in homeland security. Our active, reserve, and National Guard forces are integrated into communities throughout our country, and they bring to bear the largest and most diverse workforce and capabilities in government to protect the United States from direct attacks and conduct missions to deter, prevent, and defeat threats against our Nation. (HSC, 2007, pp. 50–51)

As highlighted in the 2005 CRS Report to Congress *Hurricane Katrina: DoD Disaster Response*, there are intricacies associated with military operations in the homeland. Still, the report recognizes the significant contributions of the military to crisis situations, stating,

Nevertheless, absent the development of greater civilian capabilities in disaster response, the expectation will remain that DoD will provide substantial, if not massive, assistance in instances of catastrophic disasters. (Bowman, Kapp, Belasco, 2005, p. 14)

The June 2008 National Defense Strategy is a foundational document for DoD doctrine as it directs the military on its civil support role in conjunction with the objective of defending the homeland:

While defending the homeland in depth, the Department must also maintain the capacity to support civil authorities in times of national emergency such as in the wake of catastrophic natural and man-made disasters. The Department will continue to maintain consequence management capabilities and plan for their use to support government agencies. Effective execution of such assistance, especially amid simultaneous, multi-jurisdictional disasters, requires ever-closer working relationships with other departments and agencies, and at all levels of government. (NDS, 2008, p. 7)

In 2005, Colonel Thomas LaCrosse documented the legal authorities for using the armed forces domestically, historical precedents from the Civil Defense Program to missions along the U.S. border, types and capabilities military of forces, and the National Response Plan and affiliated programs in writing *Homeland Security and Homeland Defense: America's New Paradigm*. In his conclusion, LaCrosse states,

The military has long provided assistance in cases of disaster, and has routinely provided support to state and territorial governors, occasionally administering governmental affairs until local governance was reestablished. Military personnel and their associated equipment, although organized to conduct combat operations, can be rapidly deployed domestically with proper authorization. (LaCrosse, 2005, p. 16)

Military personnel have the propensity to assess a situation and act accordingly, but to maximize unity of effort in the homeland, it is imperative that laws, policies, and

other interagency responsibilities are considered. This is especially important to those assigned to United States Northern Command (USNORTHCOM), the geographic combatant command with an area of operations that includes the homeland.

On April 17, 2002, Secretary of Defense Donald Rumsfeld announced the establishment of USNORTHCOM through changes to the 2002 Unified Command Plan. The new combatant command was assigned responsibility for land, aerospace, and maritime defense of the geographical area, which includes the continental United States. During the press conference, Rumsfeld said,

NorthCom will help the department better deal with natural disasters, attacks on U.S. soil, or other civil difficulties. It will provide for a more coordinated military support to civil authorities such as the FBI, FEMA, and state and local governments. (Rumsfeld, 2002)

Within the federal system of the United States, there is no single organization resourced to handle all aspects of disaster prevention or response, therefore, virtually all activities are multi-disciplinary in nature. The Defense Science Board Report, *Unconventional Operational Concepts and the Homeland* identified the significant challenges with interagency coordination:

The major departments of the federal government responsible for coordinating the elements of national power in the defense of the nation—the Departments of Defense, Homeland Security, Justice, and State, as well as the intelligence community—have varying degrees of authority and responsibility under different circumstances. Coordinating these efforts in remote theaters where roles and responsibilities are well understood is very difficult. The challenges are even more acute in the homeland. (DSB, 2009, p. 38)

Pre-coordinated and exercised relationships significantly ease the challenges at the scene of a disaster and contribute to an effective response. An understanding of roles, authorities, responsibilities, and capabilities the military contributes in the homeland when directed by the President or Secretary of Defense would be beneficial to homeland defense and security mission partners.

In discussing Defense Department challenges for the Obama administration, Michele Flournoy and Shawn Brimley write about improving interagency capacity and unity of effort:

The Defense Department does not operate in a vacuum. More often than not, its ability to contribute to achieving the nation's strategic objectives depends on the performance and cooperation of other parts of the U.S. government. Two particular problems have plagued interagency operations...the absence of sufficient operational capacity in the civilian agencies of the U.S. government and the lack of processes and mechanisms to effectively integrate the actions of multiple agencies to achieve unity of effort across the U.S. government. (Flournoy & Brimley, 2008, p. 71)

D. FORMING A NEW “JOINTNESS” FOR HOMELAND DEFENSE AND SECURITY

The Defense Science Board Report *Unconventional Operational Concepts and the Homeland* addresses the need for understanding interagency roles pertaining to domestic operations:

To assure seamlessness among response elements and DoD, the Department [DoD] must expand its concept of “jointness” to include other federal, state, regional, local and tribal entities. This can best happen through leadership and practice. But homeland security and defense leaders, both within DoD and other agencies, need to be developed, just as DoD has so carefully developed its leaders for the “away game.” (DSB, 2009, p. v)

The 2009 Quadrennial Roles and Missions Review (QRMR) stated, “Since our Nation’s future security depends equally on interagency cooperation, coordination, and integration efforts, building unity of effort requires us to expand the concept of jointness beyond the Department of Defense.” (QRMR, 2009, p. 36)

Secretary of Defense Robert Gates advocated the concept of a “new jointness” via the 2008 National Defense Strategy. In a 2009 *Joint Forces Quarterly* article, *The National Defense Strategy Striking the Right Balance*, Gates writes, “As the National Defense Strategy puts it, success will require us to “tap the full strength of America and its people”—civilian and military, public sector and private.” (Gates, 2009, p. 3)

Per the 2010 Quadrennial Defense Review, the DoD is committed to strengthening relationships to improve unity of effort and “a whole-of-government approach to national security challenges.” (QDR, 2010, p. xiv)

In the 2005 *CJCS* [Chairman of the Joint Chiefs of Staff] *Vision for Joint Officer Development*, General Peter Pace explained new expectations of military officers:

Following the CCJO’s [Capstone Concept for Joint Operations] assumption that future joint operations will be planned and executed within a multi-Service, multi-agency, multi-national environment, future joint officers must possess the inherent ability to make the sum of the whole greater than the parts by possessing an unprecedented ability to integrate diverse elements in a complex environment. (Pace, 2005, p. 1)

The CJCS expectation requires equipping personnel with enhanced interagency skill sets. Interdisciplinary education is one mechanism to address this requirement for homeland defense and security professionals.

E. NEED FOR INTERDISCIPLINARY EDUCATION

There is a preponderance of literature advocating for joint, interdisciplinary homeland security professional education, including Executive Order 13434 “National Security Professional Development”. Signed by President George W. Bush on May 17, 2007, EO 13434 provides:

In order to enhance the national security of the United States, including preventing, protecting against, responding to, and recovering from natural and manmade disasters, it is the policy of the United States to promote the education, training, and experience of current and future professionals in national security positions (security professionals) in executive departments and agencies.

The National Strategy for the Development of Security Professionals established the groundwork for the National Security Professional Development (NSPD) program, stating:

The national security professional will need access to education, training, and opportunities to work in coordination with other Federal departments and agencies, State, local, territorial and tribal governments, the private

sector, non-governmental organizations, foreign governments, and international organizations, on order to accomplish the following goals:

- *Better understand partner organization objectives and mission requirements, interdependencies and synergies between the public and private sectors, and different organizational cultures;*
- *Enable professional development to transcend organizations, levels of government, missions, and specific national security disciplines; and*
- *Improve the overall capability to safeguard national security in a dynamic risk environment.* (DOJ, 2007, pp. 2–3)

Though it seems limited progress has been made toward accomplishing its goals, the National Strategy also explained the benefits of combining the fundamentals of education, training, and professional experience:

...they [inter-office, interagency, and inter-governmental assignments, fellowships, and exchanges] foster an improved awareness of the missions and personnel in other offices, which helps break down cultural barriers and promote professional relationships that have valuable practical applications during national security missions. As personnel increasingly learn to work together and synchronize common missions, we will achieve unity of effort to improve the Nation's overall national security-related capabilities. (DOJ, 2007, p. 8)

With a mission to “Prepare military and civilian leaders from the United States and other countries to evaluate national and international security challenges through multidisciplinary educational and research programs, professional exchanges, and outreach,” National Defense University (NDU) was uniquely suited to address the education needs of National Security Professionals. Therefore, NDU's National War College, Industrial College of the Armed Forces, and Joint Forces Staff College administered a pilot program for the education of National Security Professionals during academic year 2008–2009.

Captain John Yeager, United States Navy, Retired, authored a *Joint Forces Quarterly* feature article titled *Developing National Security Professionals*, about the pilot program. Yeager writes,

The potential exists to enhance U.S. national security by creating a program for the development of national security professionals. A robust development program that includes education, training, and professional opportunities promises to increase collaboration among agencies. (Yeager, 2008, p. 120)

Per Yeager, NDU's pilot program for National Security Professionals was designed to "educate an interagency cadre of professionals capable of integrating the contributions of individual Government agencies on behalf of larger national security interests." (Yeager, 2008, p. 115) For the 38 students selected to participate in the pilot program, the curriculum was created through the efforts of a consortium of volunteers representing academic, military, and civilian government sectors and included five learning areas: national security strategy; agencies' supporting strategies; joint, interagency, and multinational capabilities; national planning systems and processes; and strategic leader development. These subject areas are comparable to the courses associated with the Center for Homeland Defense and Security master's degree program, which will be explored as an example of interdisciplinary education during this research. The NDU program is a valuable step toward developing federal level interagency experts, but similar to other programs, excludes the state, local, and private sector engagement.

DoD created a *Civilian National Security Professional Development Implementation Plan* dated September 2008 to address the mandates in Executive Order 13434 and correspond to the Department of Justice's National Security Professional Development Implementation Plan. The *DoD Implementation Plan* includes education, training, and experience pillars built upon the existing DoD Human Capital Strategy. This plan advances many concepts for enhancing interagency coordination, but its focuses on civil servants does not acknowledge the interaction that military personnel also have with interagency partners.

DoD's *Quadrennial Roles and Missions Review Report* identified deficiencies beyond the Implementation Plan. It addressed the presidentially directed National Security Professional Development by asserting the importance of interagency professional development:

Many lingering challenges between interagency staffs may be partially attributable to a lack of understanding and appreciation of each others' organizational cultures, priorities, requirements, and practices. Traditionally, civil servants and military members have few formal opportunities for interagency training, education, and professional development. Beyond rudimentary familiarization at staff courses, personnel systems have not typically encouraged professional development that fosters a deep understanding of other agencies. (QRMR, 2009, p. 34)

David Heyman and Dr. James Carafano dedicate an entire section of *Homeland Security 3.0: Building a National Enterprise to Keep America Free, Safe, and Prosperous* to "Establishing National Programs for Professional Development." Heyman and Carafano define homeland security professional development as

the creation of a stable and diverse community of homeland security professionals with relevant skills, attributes, experiences, and a comprehensive knowledge of the homeland security enterprise. (Heyman & Carafano, 2008, p. 17)

Homeland Security 3.0 includes the most inclusive list of multi-disciplinary, multi-jurisdictional homeland defense and security stakeholders found during this research:

These homeland security professionals include federal, state, regional, and local government employees and contractors; public and private critical infrastructure and key resource personnel (e.g., transit police, chemical plant security, and utility operators); and professionals in other security-related institutions (e.g., academic programs, Federally Funded Research and Development Centers, think tanks, and consulting firms) with responsibilities and missions related to safeguarding the nation. Cross-disciplinary and interdisciplinary education and training are especially valued in preparing professionals. (Heyman & Carafano, 2008, p. 17)

Dr. Carafano lectured on "*Herding Cats: Understanding Why Government Agencies Don't Cooperate and How to Fix the Problem*" to a conference on interagency operations. In his paper under Professional Development, Dr. Carafano notes:

One key instrument for facilitating integrated action is a shared body of common knowledge and practices, common experiences, and trust and confidence among practitioners. (Carafano, 2006, p. 3)

He acknowledges the military's creation of joint professional development and cites the interagency's lack of such a program.

The CSIS report *Managing the Next Domestic Catastrophe Ready (or Not)?* discusses expanding the Goldwater-Nichols transition of DoD joint training and experience to include the interagency community.

In part because this reform [Goldwater-Nichols] has been so successful in the military context, there is growing recognition that professional education and training that incorporates exposure to multiple disciplines and organizations must be an important element of a robust national homeland security system. (Wormuth & Witkowsky, 2008, p. 76)

The Federal Response to Hurricane Katrina Lessons Learned also highlighted the importance of interdisciplinary education by stating,

Over the long term, our professional development and education programs must break down interagency barriers to build a unified team across the Federal government. (EOP, 2006, p. 73)

The 2007 *National Strategy for Homeland Security* identifies the need for interagency homeland security education and the importance of interagency experience under the headline of "Investing in Intellectual and Human Capital":

In order to ensure the success of the Homeland Security Management System, our Nation must further develop a community of homeland security professionals. This requires establishing multidisciplinary education in homeland and relevant national security policies and strategies; the planning process; execution of operations and exercises; and overall assessment and evaluation. Furthermore, this should include an understanding and appreciation of appropriate regions, religions, cultures, legal systems, and languages. Education must continue outside the classroom as well—in order to enhance knowledge and learning, build trust and familiarity among diverse homeland security practitioners, break down organizational stovepipes, and advance the exchange of ideas and best practices, we must continue to develop interagency and intergovernmental assignments and fellowship opportunities, tying them to promotions and professional advancement. (HSC, 2007, p. 45)

Civil-military relations and engagement with interagency partners is not intuitive to military structures. A typical focus on command and control is replaced with the need

for communication and collaboration. To understand the intricacies associated with multi-disciplinary scenarios, military officers, as a specialized segment of national security professionals, require applicable education.

Personnel assigned to United States Northern Command (USNORTHCOM) are expected to achieve core and advanced knowledge competencies within the first six months following arrival at the Command as depicted in the graphic below. This on-the-job training is essential to military personnel newly assigned to a homeland defense and civil support environment. Existing training and education programs documented in NORAD and USNORTHCOM Instruction 36-138, *Academic Training and Education Program*, are extensive. However, the training does not comprehensively prepare individuals for the myriad of interagency situations they will encounter during the course of their assignment to USNORTHCOM. The program is incomplete from the perspective of fully incorporating non-military stakeholders in the training and education opportunities.

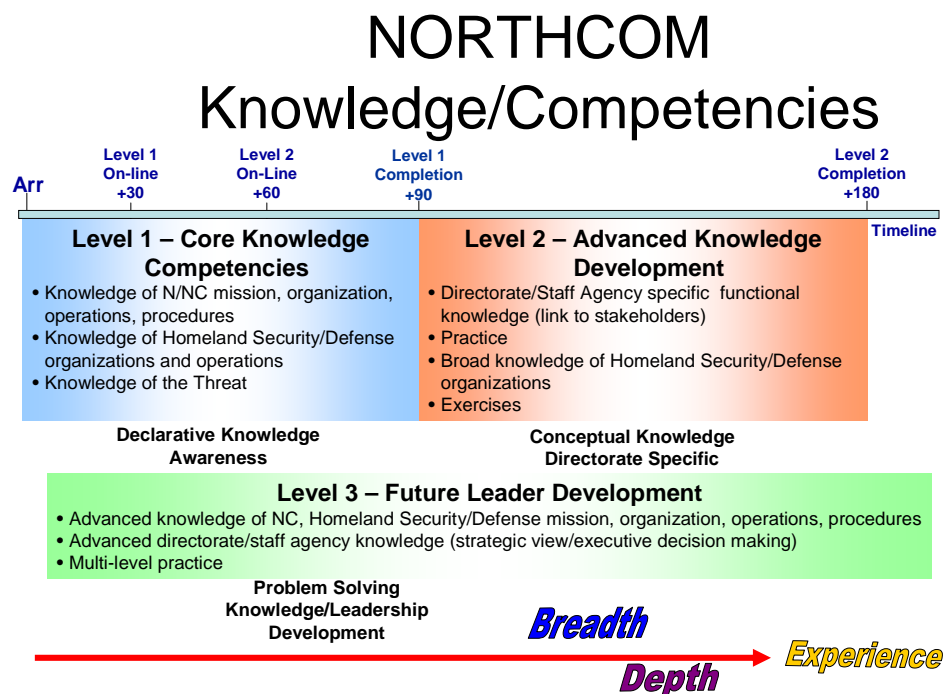


Figure 1. USNORTHCOM Personnel Development Levels (Adapted from Rich Berkebile briefing on U.S. Army Command and General Staff College Homeland Security Studies Program to HS Education Summit, 14 March 2008)

The key to successful prevention, protection, response, and recovery depends upon the relationships of all the “enterprise” stakeholders—military, civilian, non-government organizations, and the private sector—across all levels of government. Educating tomorrow’s future leaders with an awareness of interagency concepts will form a foundation to build upon. In his CHDS thesis recommendations, Thomas J. Currao advocates for multi-disciplinary education and training, quoting New York City Office of Emergency Management Deputy Commissioner for Operations, Brad Gair:

I think that the other piece is training, because if we learn things together, we build trust on a couple of levels, we have a common knowledge base that we are coming from, and that we are starting to meet people from other agencies, like the program you are in, building trust and knowledge across jurisdictions.” (Currao, 2009, p. 93)

Understanding the roles and responsibilities associated with interdisciplinary approaches for homeland defense, homeland security, and domestic civil support operations will enable perspectives focused on critical relationships and yield informed national/homeland security professionals.

F. SHARED LEARNING ENVIRONMENT

In *Strategic Planning for Public and Nonprofit Organizations*, John Bryson referenced Professor Chris Huxham’s work on the theory of collaborative advantage as “...the synergistic outcome gained through collaboration in which something is achieved that could not have been achieved by any organization acting alone.” (Huxham, 2003, p. 403, quoted in Bryson, 2004, p. 378) As Max Wertheimer’s Gestalt theory asserts, “the whole is greater than the sum of its parts.”

To improve patient care, education of health professionals is transitioning to a shared learning environment. A 2001 *Medical Education* article, *Multiprofessional learning: the attitudes of medical, nursing and pharmacy student to shared learning*, describes the concept of interprofessional learning”:

...[I]nterprofessional learning is an educational process through which students are provided with structured learning opportunities for shared learning. The goal of such learning is to enable learners to acquire

knowledge, skills and professional attitudes which they would not be able to acquire effectively in any other way. This is how health professional students are helped to understand the complexities of working in a multiprofessional environment. (Horsburgh, Lamdin, & Williamson, 2001, p. 877)

A 2005 article in the *Journal of Public Health Management and Practice* highlights the Texas Training Initiative for Emergency Response (T-TIER) as it “fosters the integration and collaboration of key organizations and disciplines.” (Quiram, Carpendar, & Pennel, 2005, p. S83) The article addresses the value of the pioneering initiative as it explains,

This unique, multidisciplinary approach enhances respect and collaboration among the various disciplines, limiting unilateral emergency preparedness planning and response at the national, state, and local levels. (Quiram, Carpendar, & Pennel, 2005, p. S83)

Successes in the building of respectful relationships, collaboration and teamwork, and understanding of other roles and responsibilities in the health care professional education model lends support to the concept of interdisciplinary education for homeland security and homeland defense professionals.

There are multiple examples of undergraduate courses with an emphasis in homeland security that could inform the selection of appropriate material for interdisciplinary education. The Center for Homeland Defense and Security (CHDS) is referred to as “the nation’s homeland security educator”. Elements of the CHDS master’s degree program and the University and Agency Partnership Initiative (UAPI) will be examined as a premier model for multi-disciplinary homeland security education. Propagating the Center for Homeland Defense and Security program to other locations could enhance unity of effort through joint education opportunities.

Dr. James Carafano (Heritage Foundation Lecture 955, *Herding Cats*) and the *DoD Civilian National Security Professional Development Implementation Plan* champion establishment of a National/ Homeland Security University to advance federal government interagency cooperation. This proposal, however, only accounts for a portion of the stakeholders associated with homeland defense and homeland security. It

is essential to include local, state, public, and private sectors in addressing roles, responsibilities, and contributions to prevention, preparedness, response, and recovery within the homeland. The CHDS program attracts participants representing this geographical, jurisdictional, and disciplinary diversity.

Similar advocacy was identified in The Federal Response to Hurricane Katrina: Lessons Learned:

Beyond current plans and doctrine, we require a more systematic and institutional program for homeland security professional development and education. While such a program will center on the Department of Homeland Security, it should extend to personnel throughout all levels of government having responsibility for preventing, preparing for, responding to, and recovering from natural and man-made disasters. For example, DHS should establish a National Homeland Security University (NHSU)—analogous to the National Defense University—for senior homeland security personnel as the capstone for homeland security training and education opportunities. The NHSU, in turn, should integrate homeland security personnel from State and local jurisdictions as well as other Federal departments and agencies. (EOP, 2006, p. 73)

Indeed, many have advocated for the transition of National Defense University to a homeland security focused institution. Acknowledging the concept created by Vice-Admiral Arthur K. Cebrowski, USN (Ret.), CSIS *Beyond Goldwater-Nichols* advocated for the transition of National Defense University (NDU) from its focus on Department of Defense issues to broader national security concerns, making it “the premier institution focused on “capital J Jointness” or “Super-Jointness.” The new NSU [National Security University] will then be a unique complement to earlier military schooling focused on Service doctrine and “small j” interservice joint operations.” (CSIS, 2005, p. 121)

The transition of NDU to NSU was also documented in the 2006 Quadrennial Defense Review:

Acknowledging the complexity of the 21st century security environment, this new institution will be tailored to support the educational needs of the broader U.S. national security profession. Participation from interagency partners will be increased and the curriculum will be reshaped in ways that

are consistent with a unified U.S. Government approach to national security missions, and greater interagency participation will be encouraged. (DoD, 2006, p. 79)

The idea was squelched, however, by Congressman Ike Skelton and then-Chairman of the Joint Chiefs of Staff, General Peter Pace, USMC, out of concern that the school would lose its focus on providing joint professional military education. Instead of transitioning NDU, expanding its interagency focus to collaborate with additional homeland defense and security stakeholders could present partnerships toward achieving comprehensive national security professional development. The educational experience would result in broader planning, training, exercising, and operational execution.

G. CONCLUSION

In remarks to the graduating class of the United States Naval Academy on June 7, 1961, President John F. Kennedy shared the following:

You must understand not only this country but other countries. You must know something about strategy and tactics and logic—logistics, but also economics and politics and diplomacy and history. You must know everything you can know about military power, and you must also understand the limits of military power. You must understand that few of the important problems of our time have, in the final analysis, been finally solved by military power alone. When I say that officers today must go far beyond the official curriculum, I say it not because I do not believe in the traditional relationship between the civilian and the military, but you must be more than the servants of national policy. You must be prepared to play a constructive role in the development of national policy, a policy which protects our interests and our security and the peace of the world. (Kennedy, 1961)

Given the overseas and domestic environments faced by today's military personnel, President Kennedy's guidance remains applicable. The intricacies of homeland defense and civil support necessitate the adaptation of military and national security professional education to incorporate interdisciplinary homeland defense and security concepts. The shared learning environments present in the health care meta-discipline and exemplified at the Center for Homeland Defense and Security facilitate such interdisciplinary homeland defense and security education. Increasing the

opportunities for interdisciplinary education could foster the building of collaborative relationships; mutual understanding of roles, responsibilities, authorities, capabilities, and gaps; and communication and information sharing, making an overall contribution to enhanced unity of effort.

H. HYPOTHESES OR TENTATIVE SOLUTIONS

The health care profession has improved patient care through shared learning environments involving doctors, nurses, dentists, pharmacists, emergency medical technicians, and others. Interdisciplinary education of the medical field has demonstrated an improvement in collaboration and teamwork resulting in more comprehensive treatment of patients.

The hypothesis of this thesis is the homeland defense and homeland security community could benefit from similar shared learning opportunities for military personnel and national/homeland security professionals. Bringing together personnel from the variety of homeland defense and homeland security stakeholders (fire, law enforcement, military, emergency management, public health, etc.) broadens the perspective of the individual beyond their particular discipline to a homeland defense and national security professional viewpoint. The interagency collaboration; relationship building; information sharing; joint planning, exercising, and execution benefits contribute to (and could enhance) unity of effort in homeland operations.

The Center for Homeland Defense and Security (CHDS) provides an opportunity to evaluate interdisciplinary education in a homeland defense and security shared learning environment. Recommendations from my research will include a proposal to incorporate the CHDS interdisciplinary, multi-jurisdictional approach to education into segments of existing or future military and national/homeland security professional education programs.

This research will benchmark the shared learning environment progress demonstrated by the health care profession's comprehensive approach to patient care and the interdisciplinary nature of the educational opportunity at CHDS. The benefits of

fostering new “jointness” through the education of military and national/homeland security professionals will enhance unity of effort among homeland defense and security stakeholders.

I. SIGNIFICANCE OF RESEARCH TO: 1) THE LITERATURE, 2) FUTURE RESEARCH EFFORTS, 3) IMMEDIATE CONSUMER (IDENTIFY), 4) HS PRACTITIONERS AND LEADERS NATIONALLY

This thesis project synthesizes a variety of challenges to achieving unity of effort in interagency operations and attracts attention to the benefits of interdisciplinary education as a mechanism to engage military personnel and national security professionals. Presidents, military leadership, think tanks, and experts in academia have identified their awareness of the need for interdisciplinary, multi-jurisdictional educational opportunities for military personnel and national/homeland security professionals.

Since examples of deficiencies in the achievement of unity of effort are plentiful, the challenge is to gain a collective awareness of the opportunity for interdisciplinary education to serve as a catalyst for interagency collaboration and cooperation. Nearly two decades of military and civilian leadership have advocated for professional education as an avenue for achieving unity of effort in homeland and national security. By integrating a variety of strategies and reports, this research serves to acknowledge the collaborative capacity built via multi-jurisdictional, interdisciplinary education as a method to enhance unity of effort and build a cadre of military and national security professionals.

The linkage between the concepts of unity of effort and the benefits of a shared learning environment for homeland defense and security professionals will be explored by studying accomplishments of the Center for Homeland Defense and Security. Military and homeland security leadership will be encouraged to expand the template into existing and future homeland defense and security courses to improve overall unity of effort in homeland operations.

The preponderance of current interagency and unity of effort documentation is focused on overseas civil-military operations, but has applicability to homeland defense and homeland security. For instance, the United States Institute of Peace and the U.S. Army Peacekeeping and Stability Operations Institute jointly wrote the *Guiding Principles for Stabilization and Reconstruction*. This document establishes a strategic framework for stabilization and reconstruction that identifies five end states and seven crosscutting principles that are applicable to all five end states.

The essence of unity of effort as one of the framework's crosscutting principles is explained by Beth Cole and Emily Hsu of the U.S. Institute of Peace in a *Military Review* article as

Achieving unity of effort in these complex environments requires an institutionalized approach that includes a shared strategic vision for where we are headed, a coherent plan with targeted priorities that cascade from that vision, and implementation of that plan in accordance with shared principles of action. (Cole and Hsu, 2010, pp. 7–8)

In referencing its companion document, U.S. Army Field Manual 3-07, *Stability Operations*, the *Guiding Principles* explains,

Unity of effort begins with a shared understanding of the environment. It refers to cooperation toward common objectives over the short and long term, even when the participants come from many different organizations with diverse operating cultures. (USIP, 2009, pp. 3–12)

Besides shared understanding of the situation and a shared strategic goal, the *Guiding Principles* identifies several components of unity of effort including integration, cooperation and coherence, and civil-military cooperation. All of these components are applicable to defense, support, and security operations within the homeland.

As military components and civilian counterparts are learning about stabilization, reconstruction, counterinsurgency operations, and building partnership capacity for overseas environments, U.S. forces should also be trained and educated to apply those unity of effort skill sets to the domestic interagency environment. The concepts

associated with achieving unity of effort are applicable in overseas reconstruction efforts, humanitarian assistance operations, homeland defense and civil support missions, and homeland security.

Military personnel are increasingly involved in domestic homeland defense and civil support operations, but the enterprise of stakeholders lacks unity of effort. Few military personnel have the opportunity to experience the education provided at the Center for Homeland Defense and Security. However, as this research will support, there is great value in establishing a shared learning environment for homeland defense and security. Including a multi-jurisdictional segment or initiating a new Interdisciplinary Approaches to Homeland Defense and Homeland Security education course into existing military and national/homeland security professional education programs could facilitate core knowledge about interagency operations. Since the homeland defense and security interagency environment is dynamic, the content of interdisciplinary, multi-jurisdictional programs must be continuously reviewed, refined, and updated as appropriate. Future research efforts can continue to build upon the shared learning environment methodology to measure the effectiveness of the concept to the homeland security and homeland defense meta-discipline.

Additionally, effort should be made by the Department of Defense to identify a career path for the development of military as well as civilian personnel with homeland security and defense expertise. Military Foreign Affairs Specialists are educated and then assigned duties according to their unique skill sets to capitalize upon and build civil-military experience.

The purpose of this research is to apply interdisciplinary education methods to address the struggles with achieving unity of effort in the homeland. Cultivating the homeland perspective and expanding interagency jointness will complement the Chairman of the Joint Chiefs' vision for Joint Officer Development and the Presidential directive to establish national security professionals.

J. METHOD

This thesis explores the concept of enhancing unity of effort in homeland defense, homeland security, and civil support through interdisciplinary, multi-jurisdictional education via a modified policy options analysis. The research will identify a preponderance of strategies and leadership mandates which recognize the need for and importance of unity of effort. Equally essential is the educational development of the cadre of military and national security professionals equipped with the critical thinking and collaboration skills necessary to confront complex homeland defense and security scenarios. Specific issues that inhibit interagency cooperation and collaboration related to elements of unity of effort are reviewed in answering the question of “Why do the homeland defense and homeland security communities struggle with unity of effort?”

The hypothesis of this effort is that military personnel and national security professionals in the homeland defense and homeland security communities could benefit from shared learning opportunities similar to those offered to professionals involved in the meta-discipline of health care. A variety of studies of multi-disciplinary medical professional education have identified improvements in overall patient care when doctors, nurses, pharmacists, and dentists have been educated in a shared learning environment.

This thesis investigates the Texas Training Initiative for Emergency Response (T-TIER). T-TIER illustrates a multi-disciplinary approach used to orient personnel representing a variety of disciplines to the role of public health in emergency preparedness. Aimed at reaching a broad audience of both planners and responders, T-TIER uses multiple training methodologies to foster collaborative relationships, understanding and awareness of other’s roles and responsibilities, and integrated preparedness planning for responses across multiple jurisdictions.

The corresponding application of this shared learning environment for homeland defense and national/homeland security professionals is represented in the exploratory study of the Center for Homeland Defense and Security (CHDS). CHDS will be evaluated as “the nation’s homeland security educator” fostering the transformation of

individuals with discipline-specific views into national security professionals with broader perspectives. As a Naval Postgraduate School Special Report on *Mission: Homeland Security Resilience Through Education & Research* posits,

Put it all together, and you have the creation of a new kind of professional. A diverse group of first responders, military officers, civilians and the like representing an ever-expanding range of organizations and agencies—but all cohesively bound through an advanced education in this developing field. (Seals, Arakawa & Kuska, 2010, p. 4)

The policy implications of advocating for an increased capacity for unity of effort through the establishment of integrated multi-jurisdictional and interdisciplinary learning opportunities are explored in historical and present-day strategic documents and leadership rhetoric. Document reviews and personal observation are used in evaluating the ability of T-TIER and CHDS to address challenges in achieving collaborative capacity and unity of effort. These two programs are analyzed and considered as evidence that interdisciplinary education is an appropriate technique to enhance unity of effort among collaborative teams addressing complex challenges.

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III. UNITY OF EFFORT CHALLENGES AND POTENTIAL SOLUTIONS

Glued to a television...watching unimaginable events unfold...how could this be happening? America unites in awe and disbelief. This is an accurate description of how most of the country responded to the events of September 11, 2001. It also describes what has been called “the Miracle on Ice,” the Olympic hockey game between the USA and the USSR played on February 22, 1980.

In *The Boys of Winter*, author Wayne Coffee artfully tells the story of the 1980 U.S. Olympic Hockey Team—the individuals that comprised the team and the coaching staff, the arduous path to victory, and what for many players and fans became a life-altering event. The experiences of the many associated with the 1980 Olympic hockey team provide similarities worth examining while we look at the benefits of multidisciplinary education as it enhances unity of effort in homeland defense, homeland security, and civil support.

In 2004, Disney produced a movie entitled *Miracle* that portrayed the story of the 1980 hockey team growing together under the unique and challenging coaching style of Herb Brooks as they made their journey toward an Olympic gold medal. One scene in *Miracle* portrays Coach Brooks asking the players, from disparate college teams, who they play for. Initially, the players reply with the name of their college alma mater. Later in the movie, following a hockey game where the team does not appear to give their full effort, the coach says, “This cannot be a team of common men, because common men go nowhere.” After an exhausting round of wind sprints back and forth to the lines on the ice, team captain Mike Eruzione eventually speaks up and identifies himself and his hometown. The coach asks “Who do you play for?” and Eruzione replies, “I play for the United States of America.” That statement ends the conditioning drills from Coach Brooks and provides the audience with the perspective that the players have finally set aside their differences and internal competitions to form a true team.

These quotes from a movie Disney identified as “The true story behind the greatest moment in sports history” exemplify what is needed in the realm of homeland

security, homeland defense, and civil support. Just as Coach Brooks recruited, trained, and conditioned players to build the best Olympic team possible, to meet the challenges of a complex homeland defense and homeland security environment, our country deserves unity of effort from its homeland defense and homeland security practitioners.

One challenge in the homeland defense and homeland security realm is coaching personnel to see beyond their immediate affiliation to law enforcement, fire, public health, emergency management, military, etc. and focus instead on the collective unified effort of a true homeland defense and security team. For a period of time following, September 11, 2001, the entire country was united together—it is time to return to that collective since of unity.

A. THE IMPORTANCE OF UNITY OF EFFORT

The *Quadrennial Homeland Security Review* (QHSR) identified unity of effort as “the ultimate goal for maturing and strengthening the homeland security enterprise.”

A coordinated approach that promotes unity of effort will provide the strongest foundation to combat current, emerging, and future threats to the homeland. To achieve unity of effort, partners will need clearly defined roles and responsibilities, access to information, and a shared understanding of how risks are managed and prioritized to inform the allocation of limited resources. (QHSR, 2010, p. 71)

Complementing the QHSR, under the heading “Strengthening Interagency Partnerships,” the February 2010 Quadrennial Defense Review (QDR) Report states:

The Department of Defense supports the Department of Homeland Security, and other federal civilian agencies, as part of a whole-of-government, whole-of-nation approach to both domestic security and domestic incident response. It is essential that DoD improve its capabilities for contributing to civilian-led activities and operations, supporting “unity of effort” in homeland security. The Department continues to work closely with its interagency partners, in particular the Department of Homeland Security, to build capacity vertically from the federal level down to the local level, and horizontally across the federal government. DoD also values its engagement with stakeholders in the private sector, with nonprofit organizations, and with other elements of the public. (QDR, 2010, p. 70)

Coach Brooks challenged the Olympic team with “Do you think you can win on talent alone? Gentlemen, you don’t have enough talent to win on talent alone.” He also observes during the movie, “All-star teams fail because they rely solely on the individual's talent. The Soviets win because they take that talent and use it inside a system that's designed for the betterment of the team.”

While individual agencies involved in protection, preparation, response, and recovery make substantial contributions, the capability of unified efforts from disparate organizations is much greater. The talent and capacity of a homeland defense and security team could be significantly multiplied as personnel and material resources are pooled together with a focus on the elements of unity of effort. Therefore, emphasis must be placed on cultivating the abilities of a unified homeland defense and security system, rather than focusing strictly on the contributions of individual agencies or organizations.

B. CHALLENGES TO UNITY OF EFFORT IN HOMELAND DEFENSE, HOMELAND SECURITY, AND CIVIL SUPPORT

To comprehend the importance of unity of effort, it is necessary to identify features that contribute to unity of effort in homeland defense and homeland security scenarios, and then observe the ramifications of challenges within these contexts. There are many elements to consider, but this thesis incorporates the following: commonality or understanding of language and terminology; identification and comprehension of roles, missions, authorities, responsibilities, capabilities, and gaps; information sharing and communication; and interoperability. The successful contribution of all of these criteria to planning, training, exercising, and executing operations is contingent upon a development of collaborative relationships.

The need for a commonly accepted language was demonstrated during the 1992 Los Angeles Riots. The California National Guard, as well as active component soldiers and marines, were deployed in response to the civil disturbance. In his book *Fires & Furies: The L.A. Riots*, James Delk writes about a domestic dispute where the response involved police officers accompanied by marines. The police were fired upon when they reached the door and one officer yelled, “cover me!” to the Marines. In accordance with

their training, where “cover me” means provide cover using suppressive firepower, the Marines riddled the house with over two hundred bullets. The police officer had not anticipated “cover me!” would result in the discharge of weapons. Instead, he expected the marines to point their weapons and be ready to respond if necessary. This difference in terminology did not result in unnecessary injury, but now serves as an example of how misinterpretation can have dangerous consequences. (Delk, 1995, pp. 221–222)

Identification and comprehension of roles, missions, authorities, responsibilities, capabilities, and gaps is essential on many levels to achieve unity of effort in homeland defense, homeland security, and civil support. Adhering to our federal system of government, respect of state sovereignty and constitutional authorities is essential for using the military in domestic operations. There are important differences between potential missions for National Guard troops in comparison to active component or reserve military personnel.

Dr. Paul Stockton, Assistant Secretary of Defense for Homeland Defense and America’s Security Affairs, has spoken on the subject of unity of effort as a way to improve coordination between the states and the DoD in disaster response. At a conference of alumni from the Center for Homeland Defense and Security in February, 2010, Dr. Stockton stated, “Any actions to improve unity of effort must acknowledge, respect and take advantage of these constitutional dual sovereignties and dual chains of commands [state and federal]. We are going to fail if we have a unity of effort approach where one side is poaching on the other’s turf.”

In addressing recommendations from the Commission on the National Guard and Reserves, Secretary of Defense (SecDef) Robert Gates signed a policy memorandum dated January 13, 2009 with the subject of “Improving Coordination and Unity of Effort with State Responders during Emergency Response Operations.” The SecDef had directed the development of “options and protocols that allow Federal forces supporting the primary agency to assist state emergency response personnel in a coordinated response to domestic catastrophes and other emergency operations, while preserving the President’s authority as Commander in Chief of Federal forces.”

The policy memo stressed the importance of coordinated planning, training, and exercising and authorized a coordinating relationship executed through direct liaison. For the purposes of civil support, “direct liaison” was granted and defined as “an authority for Federal military forces to consult, coordinate with, and respond to State authorities...pursuant to an order by the Secretary of Defense or President to provide support to those authorities.”

An awareness of the inherent capabilities and potential gaps in local and state level responses is necessary to ensure that Federal military responders are adequately prepared and resourced to address the void they are requested to fill in an expeditious manner. All local, tribal, or state plans and capabilities are not created equal. The variations reinforce the necessity for Mutual Assistance Compacts between regional responders to ensure gaps are filled during planning and training exercises. Sharing and coordinating plans for a myriad of scenarios is also critically important to the successful engagement of stakeholders.

Prime examples of this element as an area for both success and improvement occurred in the response to Hurricane Katrina. Greg Jaffe wrote in the September 7, 2005, edition of the *Wall Street Journal*, *Katrina, Iraq Aid Efforts Hit Same Hurdles; Military Officials Say Crises Highlight Poor Coordination Among Federal Departments*, “One senior Army official said, “the same problem” that hindered reconstruction efforts in postwar Iraq arose with the response to Katrina. “It is the interagency problem,” he said. “How do you rapidly integrate all the powers of the U.S. government?” (Jaffe, 2005, p. A-4)

Segments of the military received kudos for performance during the aftermath of Hurricane Katrina in *The Federal Response to Hurricane Katrina: Lessons Learned*:

DoD — both National Guard and active duty forces — demonstrated that along with the Coast Guard it was one of the only federal departments that possessed real operational capabilities to translate Presidential decisions into prompt, effective action on the ground. In addition to possessing operational personnel in large numbers that have been trained and equipped for their missions, DoD brought robust communications infrastructure, logistics, and planning capabilities. (EOP, 2006, p. 54)

However, efforts were not unified and resources were not coordinated or timely. The same after action report identified such shortfalls:

In the overall response to Hurricane Katrina, separate command structures for active duty military and the National Guard hindered their unity of effort. U.S. Northern Command (USNORTHCOM) commanded active duty forces, while each State government commanded its National Guard forces. For the first two days of Katrina response operations, USNORTHCOM did not have situational awareness of what forces the National Guard had on the ground. Joint Task Force Katrina (JTF-Katrina) simply could not operate at full efficiency when it lacked visibility of over half the military forces in the disaster area. (EOP, 2006, p. 55)

The National Guard Bureau *J7 After Action Review on Hurricane Response September 2005* noted, “The disconnect between T10 [Title 10-Active Duty] and T32 [Title 32-National Guard] command and control structures resulted in duplication of effort. For example, the 82nd Airborne moved into a sector already being patrolled by the 45th Bde and 41st Bde with no coordination.” In circumstances where needs outweigh assets, it is important to maximize the value of the response capabilities. Lack of coordination and synchronized response decreased the effectiveness of the overall military response to areas ravaged by Hurricane Katrina and the resulting flooding.

Viewed as a national tragedy because of its publicized failures, the disjointed planning and response to the devastation in the Gulf Coast provided numerous lessons and opportunities to learn. There have been tangible improvements in unity of effort post-Katrina, most notably the annual National, States, and Territories Hurricane Response Workshop. This year’s event included nearly 50 senior federal and military officials and more than 300 attendees representing 30 states, culminating in a panel discussion including USNORTHCOM Commander, General Gene Renuart, Chief of the National Guard Bureau, General Craig McKinley, and DHS Assistant Secretary for Intergovernmental Affairs, Juliette Kayyem. General McKinley acknowledged that more agencies are communicating and collaborating better to prepare for domestic hurricane response. Lieutenant General Guy Swan, III, Commanding General of U.S. Army North captured the essence of the workshop:

This forum is a place for us to exchange ideas, plans and procedures well in advance of an emergency. There will always be chaos, and there will always be confusion, but we want to reduce that as much as possible ahead of time so that it is more manageable - and the conference goes a long way in reducing that. One of the things we want to avoid is meeting each other for the first time during an emergency event. This helps us build relationships and provides us an opportunity to look at where we can mutually support one another. (Ford, 2010)

During the 2007 Hurricane Preparation Conference, Glenn Cannon, director of FEMA's response division identified that successful relief efforts are built on partnerships among the organizations saying:

We've all learned that we can't respond to these things (by everyone doing) their own thing. There has to be a unified response. What these workshops do is give us the chance to not only integrate plans but ... to integrate people. The American people are benefited by having a coordinated, unified response to their situation. We have so much that we can use to help people, to save lives and reduce suffering. But if we don't do it in a coordinated way, we won't (accomplish) that mission in the best way possible. (Braymen, 2007)

Major General C. Mark Bowen, Adjutant General Alabama National Guard, recognized the conference allowed National Guard leadership to get to know USNORTHCOM officials saying, "With the relationship we've built here, I will feel more comfortable going to Northern Command and saying, 'Look, we need a little help in Alabama.' We've worked out a mutual aid-type agreement where we work together, and that's going to work very well for us." (Braymen, 2007)

The progress identified through the annual hurricane workshops also contributes to the next feature of unity of effort--information sharing. Examples of both successful and unsuccessful interagency information sharing and communication are plentiful. There is an inherent reluctance to share plans, information, and intelligence outside of an immediate circle of mission partners. The hesitation must be overcome to facilitate unified prevention, protection, response, and recovery associated with any given homeland defense or homeland security scenario, including natural or man-made disasters.

In the aftermath of the Mumbai, India terror attacks in November 2008, significant analysis was done to enable preparations should a similar attack be attempted on American soil. The Commander of USNORTHCOM directed his staff initiate a process to share the information they collected on the incident with state National Guard headquarters. In addition to the intelligence available through official military channels, the author of the memorandum incorporated information from New York Police Department (NYPD) Shield reports to provide further analysis. The use and sharing of information at different jurisdictional levels and across the law enforcement and military intelligence communities contributed to the safety and security of the country given an active shooter scenario.

Driven by integration, the restructure of the Intelligence Community was designed to improve the coordination and information sharing between the various agencies and intelligence partners. Congress passed the Intelligence Reform and Terrorism Prevention Act in 2004 codifying the new concept of national intelligence. *The National Intelligence Strategy of the United States of America Transformation through Integration and Innovation* was released by the Office of the Director of National Intelligence in October of 2005 and identifies the vision, mission, strategy, and mission and enterprise objectives of the Intelligence Community. Signed off by John Negroponte, Director of National Intelligence, the foreword states,

National intelligence must be collaborative, penetrating, objective, and far-sighted. It must recognize that its various institutional cultures developed as they did for good reasons while accepting the fact that all cultures either evolve or expire, and the time has come for our domestic and foreign intelligence cultures to grow stronger by growing together. (ODNI, 2005, p. 1)

Still, media reports surrounding the arrest of alleged terrorist, Najibullah Zazi, raised concerns over the sharing of information and potential turf battles between the FBI and the NYPD. (AP, 2009) One challenge lies with the assertion that NYPD Intelligence personnel took uncoordinated actions that prompted the need for arrests before other members of the potential terror ring could be identified. With the practice of intelligence-led policing, and the FBI's transition of its national security mission post-

9/11 toward being a proactive intelligence agency with a law enforcement capability, one can understand how important communication and sharing of information can be for unity of effort.

Unity of effort facilitated the arrest and subsequent prosecution of six individuals plotting an attack on Fort Dix, New Jersey. During his September 10, 2007 testimony before the Senate Committee on Homeland Security and Governmental Affairs, FBI Director, Robert S. Mueller, III, referenced the May 7, 2007, arrest of the terrorists by the FBI's Philadelphia Joint Terrorism Task Force. The investigation and arrests were enabled by cooperation with state and local agencies, as well as the military. Mueller also testified about the threat of homegrown radicalization and the valuable contribution of local, state, and federal law enforcement partners:

Identifying these individuals and groups is a tremendous challenge, and the role of our law enforcement partners is critical in these efforts. Local police officers on the streets are the frontline of the war on terrorism. They may often be the first to detect potential terrorists. The vast jurisdiction of state, local, and tribal officers brings invaluable access to millions of people and resources, which can help protect the nation and its citizens.

The information gathered on the street and in our communities is one of the most powerful tools we have. The 18,000 state and local police departments and 800,000 full-time sworn state and local police officers in the United States serve as a tremendous force multiplier in our efforts to protect the homeland from terrorist attack. (Mueller, 2007)

Interoperability is another key element contributing to successful unity of effort. The response to Hurricane Katrina highlighted the inability of response units to communicate effectively because radio frequencies and equipment were not interoperable. Advances in equipment have been made, but are incomplete in solving the entire challenge of interoperability. In *Interoperability: Stop Blaming the Radio*, Ronald Timmons writes,

Emergency scene communications dynamics are inherently complex because many diverse organizations become involved. A high degree of pre-incident diplomacy is necessary to create the governance process needed for such unprecedented levels of interagency collaboration required by the interoperability movement. (Timmons, 2007, p. 13)

Giving a briefing entitled, *Let's Talk: A pragmatic approach to interoperability*, Rear Admiral Jan Hamby, North American Aerospace Defense Command and United States Northern Command's Director of Command and Control Systems (N-NC/J6) identifies the importance of partnering with mission teammates for successful execution of homeland defense and security missions. She advocates the N-NC/J6 approach to enhance interoperability and communications by

- Reducing the impact of organizational culture, technology and governance as obstacles to information sharing (Process)
- Sharing architectural concepts and ideas to cooperatively extend a common communications infrastructure (Interoperability)
- Improving collaborative information exchange through shared processes and procedures irrespective of organization, agency or department (Information Sharing)

Hamby recommends fostering enhanced interoperability and communications “through the sponsorship of events where teammates can work together unfettered by organizational or cultural barriers.” (Hamby, 2009, slide 6)

One such opportunity is the annual Department of Defense Interoperability Communications Exercise (DICE). DICE is a joint exercise including the participants and communications equipment from each of the armed services, USNORTHCOM, DHS, and state and local agencies. The strategic goal of the exercise is to develop interoperability procedures to ensure robust support during homeland defense requirements and when federal response to natural disasters is necessary. Jim Rizzo, Chief of USNORTHCOM's Command, Control, Communications and Computers Plans Section explained,

The DICE venue is an opportunity for Department of Defense, National Guard and local first responders to get together to test their communications systems and work with each other to ensure that the systems are interoperable and we can share information between DoD, federal and local responders. (Braymen, 2007)

The final, and yet conceivably most critical, component of unity of effort has been discussed throughout the struggles and successes thus far—the importance of relationships. A popular saying in emergency management circles is “The scene of a disaster is not the time to exchange business cards.” This sentiment emphasizes the importance of establishing trust and connections in an environment free from the chaos of an emergency. Planning, training, exercises, education, and experience are among the many ways to foster relationships between homeland defense and security stakeholders.

The 9/11 Commission Report recognized the local, state, and federal nature of the emergency response at the Pentagon. The report highlighted that no emergency response is perfect, but identifies one of the reasons for success at the Pentagon scene as “the strong professional relationships and trust established among emergency responders.” The Commission acknowledged, “Many fire and police agencies that responded had extensive prior experience working together on regional events and training exercises.”

According to the *Arlington County After-Action Report on the Response to the September 11 Terrorist Attack on the Pentagon*, Washington Metropolitan Area public safety organizations routinely work together on significant events.

They also regularly participate in frequent training exercises including those hosted by the Pentagon and MDW [Military District of Washington]. All this and more contributed to the successful Pentagon response. (Arlington County, 2002, p. 12)

In the Planning, Training, and Preparedness section of Fire Department Operations, one reads,

Regular and frequent participation in exercises and other activities with neighboring jurisdictions had produced sound working relationships that were evident during the Pentagon response. (Arlington County, 2002, p. A-74)

Events such as tabletop exercises hosted by the Military District of Washington that involved local public safety organizations helped build relationships that are essential to the success of emergency operations. One of the findings of the report cited, “Prior planning and training allowed responders to effect a large, multi-jurisdictional response.”

(Arlington County, 2002, p. A-75) The Law Enforcement segment of the report provided similar commentary about the importance of exercises, attributing trust and cooperation to training and exercise experience.

In a prepared statement for testimony before the House Armed Services Committee, Michele Flournoy, summarizes the significance of unity of effort:

At the end of the day, unity of effort across the U.S. government is not just about being more efficient or even more effective in operations. It can determine whether the United States succeeds or fails in a given intervention. It can also determine whether the ultimate costs of success—both dollars spent and lives lost or forever changed—are as low as possible or higher than necessary. In this sense, unity of effort is not just something that is nice to have; it is imperative. (Flournoy, 2008)

C. BUILDING A JOINT, INTERAGENCY TEAM

Under the heading “Integrate and unify our efforts: A new Jointness,” the *National Defense Strategy* states,

A whole-of-government approach is only possible when every government department and agency understands the core competencies, roles, missions, and capabilities of its partners and works together to achieve common goals. (DoD, 2008, pp. 17–18)

The *Federal Response to Hurricane Katrina: Lessons Learned* decrees the importance of bringing together all members of the team for training and education:

These Federal professional development and education programs must integrate participants from other homeland security partners—namely, State and local governments as well as the private sector, non-governmental organizations, and faith-based organizations. As in every homeland crisis, it is inevitable that Federal, State, and local homeland security officials will come together to respond, and so it is important that we recognize the value in the old military adage that we must “train as you fight; fight as you train.” (EOP, 2006, p. 73)

The benefits of building relationships in advance of an emergency are numerous: establishing a level of trust and respect among agencies, sharing valuable information about capabilities and gaps, establishing a common operating picture and shared

situational awareness, communicating realistic expectations, understanding roles and responsibilities, and joint planning, exercising, and training. These relationships can be initiated and nurtured in an interdisciplinary academic environment focused on national security professionals.

Strong relationships between organizations are especially critical here in the Homeland, and USNORTHCOM has a philosophy of cooperation and collaboration. Partnerships include both military and non-military organizations, and close relationships with Canada and Mexico. The Command's interagency coordination group is considered a critical component with representatives from both governmental organizations (DHS, intelligence agencies, USDA, Dept. of the Interior) and non-governmental organizations such as the Red Cross. All together USNORTHCOM personnel collaborate with over 60 organizations as part of the homeland team, approximately 45 of which have liaisons within the command's headquarters. This graphic depicts a representation of the various agencies and organizations that are part of USNORTHCOM's interagency team.



Figure 2. USNORTHCOM Interagency Team

D. INTERDISCIPLINARY EDUCATION

Traditional professional military education is insufficient for the variety of missions today's military personnel are expected to perform.

...military officers themselves declare that their education system is providing too little preparation for the kind of stability operations that constitute the bulk of America's current burden in Iraq, Afghanistan, and the Balkans and in homeland security. (Guttieri, 2006, p. 236)

The Defense Science Board Panel Report, *Unconventional Operational Concepts and the Homeland* explains the genesis of the homeland defense and security enterprise:

Homeland security organizations responsible for dealing with national calamities are a diverse group: federal agencies, state and local authorities, and private firms. ... This community, in its present form, was hastily assembled following the 9/11 attacks on New York and Washington. Its "pick-up" nature has meant that homeland security and defense leaders often lack sufficiently broad perspectives across the numerous capabilities and equities participating in the homeland security mission. (DSB, 2009, p. 37)

The diversity of homeland defense and security stakeholders can be used as a key asset if personnel are given the opportunity to develop relationships and establish a sense of team unity. Homeland defense and homeland security incidents do not respect geographic boundaries, and missions in the homeland are certainly not performed in a vacuum. Thus, the interagency team concept must become engrained in the culture of national security professionals. Instead of identifying with a particular homeland security discipline, personnel should be educated and trained in the perspectives of their teammates.

E. CONCLUSION

The application of unity of effort in the world of sports is known as teamwork. The 1980 U.S. men's hockey team did not win an Olympic gold medal by playing together for the first time when they arrived at Lake Placid. They worked, trained, bonded together for months prior to the Olympics to overcome struggles and challenges: the intra-squad rivalries based upon geography and previous experiences, Coach Brooks'

psychological torment and grueling conditioning, and the need for repeated come-from-behind victories against their opponents on the ice. Through training, education, and practice, they formed a familial relationship with a foundational sense of respect and trust.

For multiple stakeholders in homeland operations, relationships based upon respect and trust contribute to mission success against the common enemies of terrorists or natural disasters. It is important to create non-emergency environments where homeland defense and security professionals can form the bonds of team unity.

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IV. THE VALUE OF BUILDING COLLABORATIVE CAPACITY, SHARED LEARNING ENVIRONMENTS, AND THE CENTER FOR HOMELAND DEFENSE AND SECURITY

One of the special features on the *Miracle* DVD includes Coach Herb Brooks commenting, “I wasn’t trying to put greatness into these guys, I was trying to pull it out.” The U.S. hockey team learned to work together and demonstrated, in Brooks’ words, “Synergy that transformed their talents into something else, and that’s what I was trying to do.” Coach Brooks accomplished his goal as the collective ability of the team surpassed the capability of each individual.

Military personnel and homeland security professionals certainly have the talent and dedication to achieve greatness by collaboratively addressing the challenges faced in homeland defense, homeland security, and civil support. As David Noble writes in *Knowledge Foundations of Effective Collaboration*, “By integrating perspectives and drawing on the specialized expertise of its members, a team can outperform even the best of its individual members.” (Noble, 2004, p. 2)

Indeed, the military champions the principle of “train as you fight” and that mentality has been expanded to include the interagency to a great extent. In a New York Times Op-Ed piece, Steven Ganyard described a southern California collaborative disaster-response training event known as Golden Phoenix, which involves local, state, federal, tribal, academic, non-governmental and private sector entities. Gaynard explains,

In responding to crises, the most persistent problem is that of collaboration—people with information and equipment who are unable to share it with those who need it most. The means to effective collaboration is social networking... (Gaynard, 2009)

Gaynard acknowledges the personal relationships formed via participation in Global Phoenix and credits them as “instrumental in combating California wildfires, improving communications between government agencies and rescue workers in Los

Angeles, even saving a climber's life on Mount Whitney.” (Gaynard, 2009) Gaynard asserts the true value of collaborative preparedness:

The degree of personal trust at the tactical level, not money or machines, is the single most important determinant of how well communities will deal with threats and disasters. But these relationships must be established in training so that first responders are not handing out business cards to one another on the way to the disaster. In addition, preparation can sort out any questions as to what the military's proper role will be in a disaster and spare us the sort of legal haggling that helped hamstring the federal response to Hurricane Katrina. (Gaynard, 2009)

A conference on Collaboration in Times of Crisis, sponsored by the Partnership for Public Service, highlighted the need to create opportunities for shared learning as “a practical and effective way to build collaborative capacity.” (Partnership for Public Service, 2008)

One of the lessons for the conference warned, “While joint exercises can be valuable, first responders can be “exercised” to death.” (Partnership for Public Service, 2008) The conference captured the need to have the right participants, scenarios that allow for failure, and lessons learned that are shared with participants to contribute to meaningful training experiences. In light of today's economy, agencies and departments, especially at the local and state level, may have difficulty allocating the resources required to participate in numerous exercises.

During the conference session on Collaboration between Levels of Government, Partnership for Public Service assembled experts from local, state, and federal levels to discuss efforts to improve intergovernmental collaboration. Panelists representing the wildland firefighting community, urban fire service, and emergency management shared best practices from their experiences coordinating local, state, and federal resources in battling wildfires and responding to other hazards.

The wildland fire community's success in working collaboratively is in part because they face up to 4,000 fires across the nation on any given day. They do not just practice in the classroom. They work together, build relationships and share lessons learned confronting real and immediate challenges. (Partnership for Public Service, 2008)

The session summary concluded,

Participants agree that as we face the challenges of an increasingly interconnected society, building the collaborative capacity of emergency responders, leaders, and policy makers is imperative to keeping Americans safe. (Partnership for Public Service, 2008)

Collaborative capacity is defined in the research of Gail Thomas, Susan Hocevar, and Erik Jansen as “the ability of organizations to enter into, develop, and sustain inter-organizational systems in pursuit of collective outcomes.” Their research resulted in identification of “Factors Affecting Inter-Organizational Collaboration” (Hocevar, Thomas & Jansen, 2006, p. 260) and “Force-field Analysis for Building Collaborative Capacity.” (Thomas, Hocevar & Jansen, 2006, p. 6)

The “Success factors” and “Barrier factors” are reflective of the previously discussed elements of unity of effort. In particular, common goals, social capital (interpersonal networks), communication and information exchange, resource sharing, and interoperability. In discussing their research studies, Hocevar, Thomas, and Jansen write:

As relationships develop, social capital accumulates in the form of increased respect, trust, information exchange and mutual understanding, all of which contribute to increased success in collaboration and an increase in what we call collaborative capacity. A new finding in this study was the identification of combined training events...that contributed to successful collaboration. (Hocevar, Thomas & Jansen, 2006, p. 267)

The Cycle of Preparedness: Establishing a Framework to Prepare for Terrorist Threats by Dr. William Pelfrey lists collaboration and information sharing as the two most essential elements for the first stage of the cycle—prevention. In Pelfrey’s writing, collaboration includes “collegiality, trust, flexibility, openness, mutual respect, social capital, and pathways of communication.” (Pelfrey, 2005, p. 8)

In addition to “inadequate communication and information sharing (distrust),” one of the barriers that inhibit collaborative capacity described by Thomas, Hocevar, and Jansen is “Lack of familiarity with other organizations.” (Thomas, Hocevar, and Jansen, 2006, p. 6) With its capabilities and capacity, the military is a key partner in preventing,

protecting, securing, deterring, detecting, defeating, responding, and recovering associated with a variety of homeland defense and homeland security scenarios.

Government Accounting Office (GAO) Report 09-849, *Homeland Defense U.S. Northern Command Has a Strong Exercise Program, but Involvement of Interagency Partners and States Can Be Improved* documented state personnel's need for information on USNORTHCOM's contribution.

State emergency management and National Guard officials told us that they participated in NORTHCOM exercises because they wanted to better understand the (1) capabilities that NORTHCOM could bring to the response to an incident and (2) command and control issues of the troops in a state when NORTHCOM is involved. (GAO, 2009, p. 35)

An informal discussion revealed the majority of participants in the master's degree program at the Center for Homeland Defense and Security is unfamiliar with the roles and missions, and in some cases even the existence of United States Northern Command. If homeland security professionals are unaware of USNORTHCOM's missions and capabilities, it is difficult for the military to contribute to homeland security unity of effort. Exploring details via training, education, and experience leads to successful unity of effort and can surmount the shortfall created by lack of awareness from potential mission partners.

Gregory T. Brunelle, Deputy Director for Preparedness, New York State Emergency Management Office, revealed a lack of familiarity with the capabilities and authorities of USNORTHCOM prior to his participation in the CHDS program. Participation in the CHDS master's program increased his understanding of the process for requesting federal military assistance within the relatively new construct established by USNORTHCOM, to understand the anticipated relationship being sought by USNORTHCOM and its state partners, and the complexity of the relationship between state and federal military forces. The relationships developed with the USNORTHCOM representatives in the program and discussions with other students empowered him with a more comprehensive understanding of the federal-state military relationship and

enhanced his ability to coordinate the development of preparedness programs and response plans for the state of New York. (Informal communication between Brunelle and the author)

In accordance with the principles of states' sovereignty and the United States Constitution, Governor's must ask for federal military assistance via an official request for assistance to the President or Secretary of Defense. The process is illustrated in the graphic below.

The National Response Framework for Civil Support

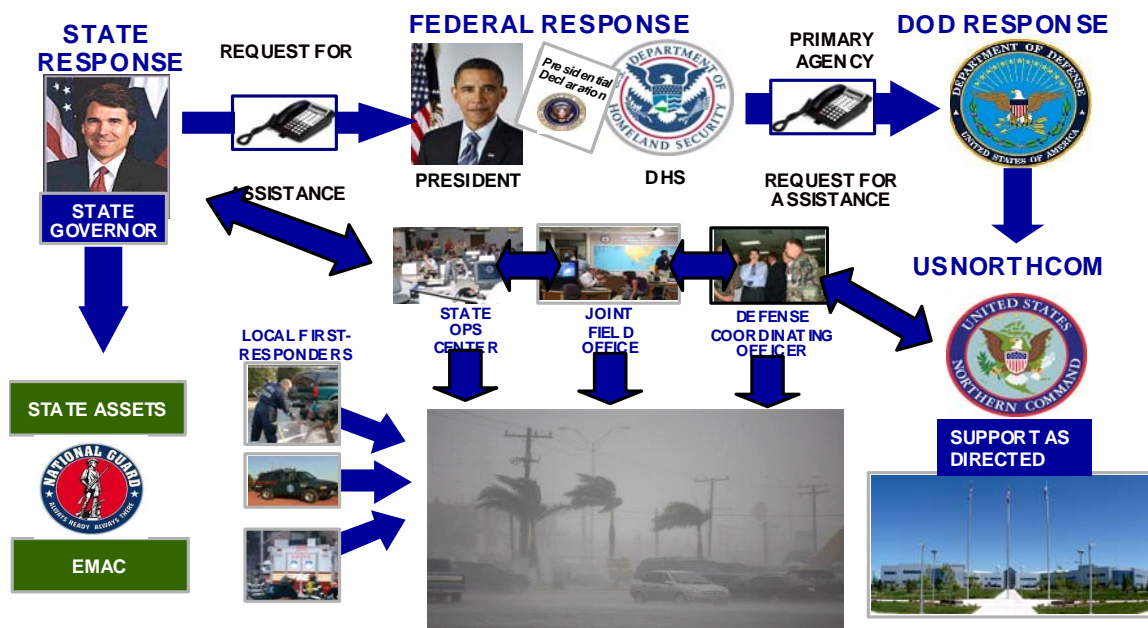


Figure 3. National Response Framework for Civil Support

As reported from numerous perspectives throughout this thesis, the time to build the necessary relationships to figure out the process above is not during the disaster response. Education, training, and exercising of the process is critical to unity of effort and overcoming the barriers to collaborative capacity.

In addition to the annual hurricane workshops, lessons learned from military participation in the response to Hurricane Katrina have also contributed to the establishment of pre-scripted mission assignments (a menu of support options available

for a Governor's request) and assigning Defense Coordinating Officers to be co-located within the 10 FEMA regions. The changes have helped decrease the time between a disaster, a request for assistance, and a military response.

After evaluating the missions assigned to USNORTHCOM, the Commander, General Gene Renuart, approved a new mission statement and added "anticipates" in July of 2007. The mission statement now reads,

USNORTHCOM anticipates and conducts homeland defense and civil support operations within the assigned area of responsibility to defend, protect, and secure the United States and its interests.

The new mission statement changed the culture of the Command, and General Renuart describes the importance of "anticipates" in *How the Military Supports Homeland Security*:

If we're not thinking ahead, if we're not planning in advance, then we'll not respond well. And the response will always be later than needed. We'd be slow and clumsy instead of resilient, creative, adaptive, and effective in crisis response. That doesn't mean you'll always preclude an event from happening. Mother Nature has a tendency to do things her own way. But if you plan for those kinds of events, if you've built good interagency working relationships, if you've done smart things like working with FEMA in its prescribed mission assignments system, then you're much more likely to be ready to mitigate and respond when bad things happen in America. I do not accept the attitude of "stuff happens." It's our job to anticipate and prepare, with the resources we have, *under applicable laws and directives*. (Renuart, 2009, pp. 30–31)

This anticipation can be difficult to accomplish in the absence of established relationships and protocols. If misunderstood or unwelcome, the prepositioning of federal military assets in preparation for disaster response can be interpreted as an invasion of a state's sovereignty.

The graphic below depicts the spectrum of operations for USNORTHCOM broken down into the Command's two missions: civil support on the left and homeland defense on the right. At the left end of the spectrum, planned special events (such as a Space Shuttle launch or the G8 Summit) are represented. In the middle of the spectrum, the Command supports unplanned events—a manmade, terrorist attack or a natural

disaster such as a wildfire or a hurricane. Extraordinary circumstances may require USNORTHCOM to act in defense of the Homeland as pictured on the far right.

The myriad of activities along the continuum of homeland defense and civil support requires a variety of military responses. The importance and unique nature of military involvement in the homeland necessitates a fundamental awareness of the operating environment. Since USNORTHCOM works with numerous partners during all phases of this spectrum of operations, it is important to have established relationships and unity of effort throughout the planning, training, exercising, and execution of these missions.

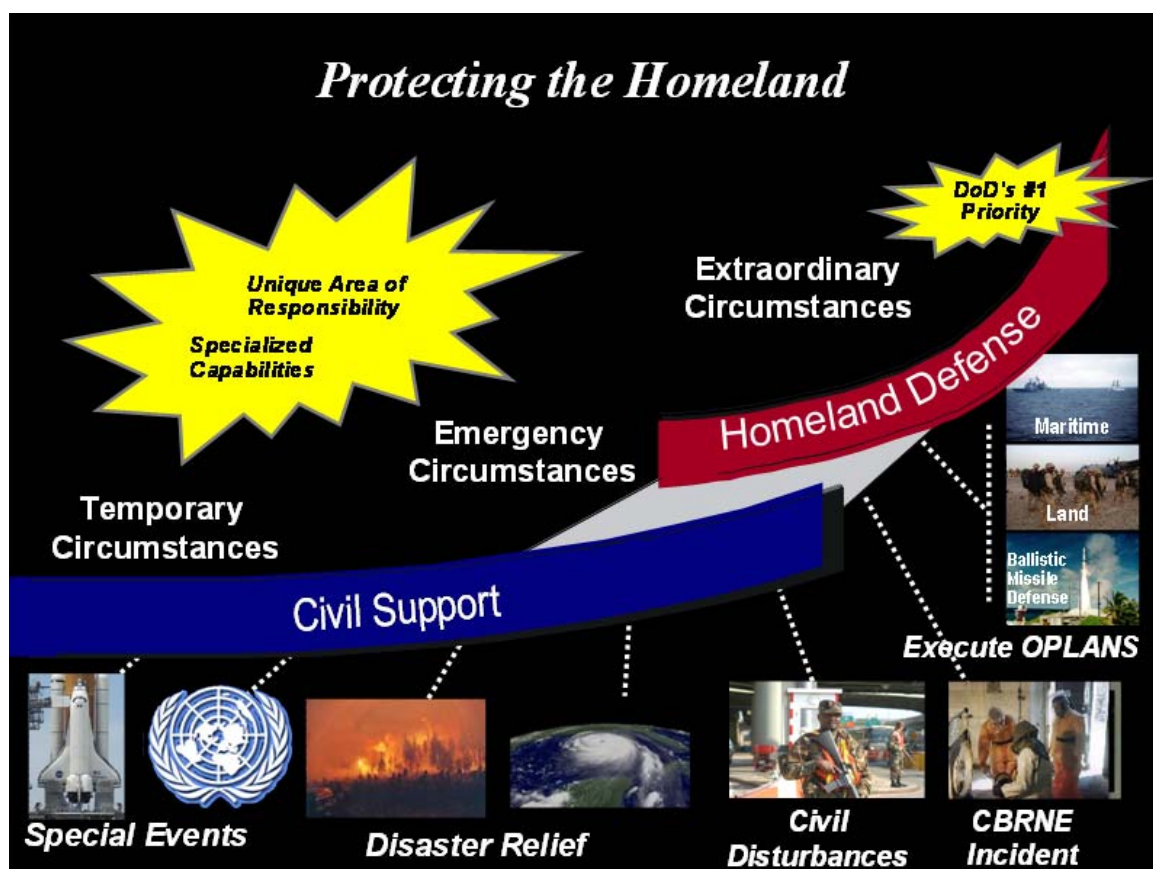


Figure 4. Spectrum of USNORTHCOM Operations

Hocevar, Thomas, and Jansen assert, “Building collaborative capacity is a multifaceted endeavor requiring systemic attention, resources, commitment, and opportunities for interaction.” (Hocevar, Thomas & Jansen, 2006, New York, p. 267)

The shared learning environments used to educate health care professionals provide foundations to build collaborative capacity applicable to prevention, preparedness, response, and recovery. Homeland defense, homeland security, and civil support frequently receive attention and resources when something goes wrong. It is time to commit to an interdisciplinary educational model that will advance the elements of unity of effort and collaborative capacity and overcome the challenges and barriers faced in planning and executing multi-disciplinary, multi-jurisdictional operations. Analysis of the success of multi-disciplinary education for medical personnel supports the hypothesis that similar gains in unity of effort and collaboration could be achieved in homeland defense and security education.

A. THE TEXAS TRAINING INITIATIVE FOR EMERGENCY RESPONSE (T-TIER)

The USA Center for Rural Public Health Preparedness is committed to strengthening the public health workforce in predominantly rural and underserved areas through the implementation of programs for life-long learning. This is especially important because “without a sufficient number of public health professionals or an adequately trained workforce, the health of the nation cannot be ensured.” (USA Center Education and Training Website)

The USA Center advocates Community Engagement, featuring many of the enablers or success factors that contribute to collaborative capacity:

- Share and exchange information, including best practices and lessons learned, among stakeholders.
- Build community stakeholder networks and partnerships.
- Improve communication between community members, local government, local service agencies, schools, and others.
- Educate / train community stakeholders to increase knowledge and build skills and community capacity.
- Discuss and plan action steps and strategies to address a public health issue.

- Empower local groups to plan and problem solve with existing assets.
- Facilitate an ongoing dialogue, which encourages communities to address other community issues.
- Begin working together as team to initiate changes that impact the long-term health of the community. (USA Center Community Engagement Web site)

Building upon the collaborative capacity emphasis, another valuable effort by USA Center for multi-disciplinary education is the Texas Training Initiative for Emergency Response (T-TIER). Designed as an approach to offer training to individuals throughout Texas with responsibilities for emergency planning, preparedness, and response, the T-TIER fosters integration and collaboration of integral organizations and disciplines associated with planning and responding to the consequences of public health emergencies. Disciplines represented via the T-TIER include

physicians, veterinarians, epidemiologists, nurses, law enforcement personnel, emergency medical technicians, hospital safety officers, port authority personnel, bioterrorism planners, and coordinators. (Quiram, Carpender, & Pennel, 2005, p. S86)

The T-TIER advocates, “Training that brings together key representatives and response personnel from both the traditional responder and public health arenas to increase understanding of the others’ roles and responsibilities is essential to ensuring a more effective response to an emergency that endangers the public’s health.” (Quiram, Carpender, & Pennel, 2005, pp. S83-S84) As with other interprofessional learning opportunities, the T-TIER participants benefit from the overall shared experience and lessons learned from colleagues representing jurisdictions throughout the state. Additionally, unilateral emergency preparedness planning and response is discouraged through the multi-disciplinary training.

The training initiative is a 4½ day module comprised of “didactic classroom activities and interactive training components” (Quiram, Carpender, & Pennel, 2005, p. S84) and culminates with a table top exercise designed to address the core competencies of public health preparedness and all-hazards response. The T-TIER addresses a wide

range of emergency preparedness topics, including an overview of public health preparedness and response, bioterrorism agents, chemical weapons, the FBI perspective, the Laboratory Response Network, animal diseases, impact of surges on the health care system, mental health and disaster issues, rapid needs assessment, risk communication, the Strategic National Stockpile, an introduction to epidemiology and outbreak investigation, Department of Emergency Management state plan and structure, and the Incident Command System. Participants gain the knowledge, skills, and abilities to plan, respond, and deploy effectively in the event of terrorist acts, infectious disease outbreaks, and other public health threats and emergencies.

The unique environment of the T-TIER provides an “opportunity to explore the roles of the broader public health workforce in relationship to the first responders, public safety personnel, hospital administrators, and others charged with protecting the public’s health, both in the didactic components as well as during the role-playing and interactive components of this training.” (Quiram, Carpender, & Pennel, 2005, pp. S86–S87)

The T-TIER collaborative environment facilitates exercising and role-playing of participants’ own jobs, as well as the roles of other stakeholders, “thus ensuring a more effective multidisciplinary response.” (Quiram, Carpender, & Pennel, 2005, p. S88) The T-TIER has been adapted to form the nucleus of a three-hour graduate-level course offered to health profession students at Texas A&M. (Quiram, Carpender, & Pennel, 2005, p. S88) Expanding the training initiative into college classrooms and via proposed distance learning programs are ways to advance the multi-disciplinary learning environment and foster relationships among personnel who must come together to achieve unity of effort in public health preparedness, planning, and response.

Many of the studies measuring the effectiveness of an interprofessional health care education identify the value of the change in attitudes toward representatives from other disciplines, as well as improved communication among participants. Building relationships between different disciplines enables learners to acquire knowledge, skills, and attitudes to help them serve in a collaborative capacity. (Horsburgh, Lamdin & Williamson, 2001, pp. 877–878) Understanding the complexities of working in a multi-disciplinary environment, including the roles and responsibilities of other mission

partners influences the achievement of unity of effort. A change in multi-disciplinary awareness of contributing stakeholders would prove beneficial during all phases of homeland defense and homeland security.

Though written on the subject of medical education, in *Educational principles underpinning successful shared learning*, Glennys Parsell and John Bligh explain,

The need to produce practitioners who are adaptable, flexible, collaborative team workers with highly developed interpersonal skills is providing both the impetus and justification for the introduction of more shared learning opportunities. (Parsell & Bligh, 1998, p. 526)

The pair identified six principles to guide interprofessional learning that are equally applicable to developing national security professional education:

- Detailed planning and organization involving all stakeholders
- Integration of theory with practice and relevance to work
- Interactive student-centered learning activities
- Teachers as role-models for multi-professional working
- Establishment of a comfortable learning climate
- Rigorous evaluation for research and further development

— (Parsell & Bligh, 1998, p. 524)

Through student evaluation of their courses, Parsell and Bligh also noted a number of issues emerging through interprofessional activities that went beyond the stated program objectives and again could be correlated to homeland defense and security education:

- Greater openness in communication
- Perspectives of other professionals
- Increased knowledge of others' range of skills
- Self-questioning of personal prejudice and stereotyped views
- Need for sensitivity towards other professionals and their values
- Teamwork skills needed for problem solving
- Communication between professionals as a barrier to working together

- Which professions work more in teams than others
- Understanding roles and responsibilities
- Opportunities to meet others not normally part of routine work environments
- Awareness of areas of crossover and overlap in knowledge and skills
- Differences in professional language

— (Parsell & Bligh, 1998, p. 527)

B. THE CENTER FOR HOMELAND DEFENSE AND SECURITY (CHDS)

Homeland Security as a discipline has evolved in countless ways, including the advent of numerous academic programs designed to educate a variety of homeland security practitioners. The preeminent program for the advancement of homeland defense and homeland security education was established in the aftermath of September 11, 2001, at the Naval Postgraduate School. The Center for Homeland Defense and Security (CHDS), referenced as “The Nation’s Homeland Security Educator,” will be evaluated as an example of multi-disciplinary homeland defense and security education.

CHDS (not to be confused with the Center for Hemispheric Defense Studies) was formally created by Congress, the Department of Justice, and the Department of Defense on April 11, 2002. One of the original mandates of the center was to

Educate and prepare a national cadre of local, state, tribal, and federal leaders to collaborate across professional disciplines and levels of government to secure the nation’s homeland by developing new policies, strategies, and organizational arrangements to prevent and respond to future attacks. (CHDS, 2009, p. 3)

The core of the CHDS program is the Homeland Security Master’s Degree Program, which is designed to include multi-disciplinary participants representing local, state, tribal, and federal interests in building interagency and civil-military cooperation for homeland defense and homeland security. An initial focus on terrorism is quickly expanded as students are exposed to new perspectives on the criticality of collaboration.

Dr. Christopher Bellavita, Director of Academic Programs at CHDS, teaches the Introduction to Homeland Security course at the beginning of the CHDS program and the Capstone course at the conclusion of the 18-month master's degree program. The introduction course covers approximately 10–12 weeks and combines two weeks of in-residence participation with on-line activities and reading assignments to be completed prior to the first in-residence session. Students are drinking water from a fire hose, but the transition to a leader in the field of homeland security begins with this course.

In writing *Changing Homeland Security: Teaching the Core*, Bellavita and his co-instructor, Ellen Gordon, identify “One of the few consistent findings in homeland security is that effective collaboration is the foundation of success.” (Bellavita & Gordon, 2006, p. 12) The authors also list as a consistent outcome of the Introduction course, “Students learn “perspectives.” They learn their discipline, agency, or level of government is not the center of the homeland security universe. They learn the critical importance of interagency and interjurisdictional collaboration.” (Bellavita & Gordon, 2006, p. 15) This remarkable transformation occurs after only two weeks of face-to-face interaction and approximately ten weeks of on-line correspondence. The importance of collaboration and perspectives is underscored by Major General Timothy Lowenberg, Adjutant General, Washington National Guard,

The only way you can embrace change is if you collaborate with others who see things from a different perspective. I can't imagine the nation being prepared without the collaboration that is stimulated at the Center [CHDS]. (Seals, Arakawa & Kuska, D, 2010, p. 5)

The students selected to participate in the CHDS program are indicative of the importance of collaboration and contribute to one of many factors that sets the program apart from other Homeland Security degree-granting institutions. CHDS focuses on recruiting geographically dispersed homeland security and military leaders from all disciplines and all levels of government to participate in the educational experience.

According to the CHDS 2002-2008 Report, *EDUCATION: The Key to Homeland Security Leadership*, disciplines that are actively recruited for participation include “emergency management, emergency medical services, fire services, government

administration, hazardous materials personnel, health services, law enforcement, public health, public safety communications, public works, public utilities, and transportation.” (CHDS, 2009, p. 11) Offices, agencies, and departments of the federal government and all branches of the military have provided students for the program.

In writing about the experience they have with the Introduction course, Bellavita and Gordon list over 50 topics that could be found under the heading “Homeland Security.” An understanding of terrorism and homeland security laws, strategies, and programs are combined with other appropriate material to establish the core ideas of the CHDS Introduction Class. (Bellavita & Gordon, 2006, pp. 1, 5–7)

Given the constantly changing environments of homeland defense and homeland security, and the diversity of student experiences, no two courses are the same. Dr. Bellavita and other world-renowned instructors throughout the CHDS program routinely update the curriculum and demonstrate flexibility when incorporating student interests in particular curriculum subjects. The dynamic nature of the program ensures active participation from the students in determining the path their education will pursue.

In discussing the CHDS Alumni Network, graduate Christopher Pope, Director of Homeland Security and Emergency Management for the State of New Hampshire, proclaims:

There is not a day goes by that I do not rely on some experience or contact directly related to my participation in the CHDS program. The program continues to build out a massive web of fire, law enforcement, emergency management, public health, and military leaders who share in their respective mission areas a core responsibility for homeland security and defense. (CHDS, 2009, p. 40)

Commissioned to conduct an evaluation of the overall impact and effectiveness of the CHDS Master’s Degree Program, Dr. Joseph Ryan interviewed alumni from Cohorts 1–7 (January 2003 to September 2007). The 102 alumni interviewed agreed that, as a result of attending the CHDS program, their perception of homeland security changed. “One of the most important changes was in the awareness of what other levels of government do and how other agencies view the homeland security landscape.” (CHDS,

2009, p. 49) The significance of having representatives from all levels of government was identified by alumni as a crucial piece of the CHDS experience. Alumni are credited with recognizing that an “integrated response from all levels of government” is required in a national homeland security strategy. (CHDS 2002-2008 Report, pp. 48–49)

The mission of CHDS is “To strengthen the National Security of the United States by providing graduate level educational programs that meet the immediate and long-term leadership needs of organizations responsible for Homeland Defense and Security.” (CHDS Information Pamphlet) As a pioneer in an uncharted field, another mandate for the CHDS program was to “facilitate the development of a national homeland security education system.” (CHDS, 2009, p. 3)

All CHDS programs are designed to create a multiplier effect through the distribution of content, technology, research and other resources to universities and agencies that are building national preparedness. (CHDS Information Pamphlet)

Curriculum and courseware for the CHDS graduate programs are provided to academic institutions and government agencies to facilitate educational collaboration through the University and Agency Partnership Initiative (UAPI). By sharing materials at no cost to UAPI participants, CHDS is helping to propagate the educational opportunities available throughout academia. Dr. Sharon Cardash of George Washington University gives the following credit:

The UAPI program from CHDS has worked tirelessly to forge bonds between and among institutions to help create and cement the educational foundations needed to develop a deep bench of homeland security professionals with the expertise and training needed to meet and defeat the challenges of today and tomorrow. By facilitating the sharing of information (both academic and policy resources), and fostering opportunities for collaboration, UAPI provides a valuable service. (CHDS, 2009, p. 28)

Additionally, UAPI conducts workshops and conferences, and hosts Homeland Defense and Security Education Summits to advance homeland security as an academic discipline and develop the multi-disciplinary and multi-jurisdictional homeland security profession.

As advertised in the information pamphlet, “CHDS programs, professional networks and educational resources build national collaboration.” The collaborative environment of CHDS promotes the multi-disciplinary and multi-jurisdictional nature of homeland defense and homeland security. In an anniversary report, *Five Years of Meeting the Homeland Security Challenge*, it is noted, “The Center’s classrooms are a one of a kind learning environment that breaks down stovepipes and builds professional networks.” (CHDS, 2008)

To truly advance the education of national security professional, this program must be expanded beyond one of a kind. The UAPI initiatives relieve the burden associated with creating a curriculum for homeland security education, but to truly capture the significant benefits of CHDS, the learning environment must include diverse participants representing all levels of government responsible for homeland defense and homeland security. Program participant Jim Curren of the Federal Air Marshall Service, summarizes, “The biggest measure you can get here is the collaboration with state and locals.”

Class composition including multiple homeland defense and security disciplines, and multi-jurisdictional levels improves the foundation of collaboration built through the shared learning experience. This collaborative transformation can be carried beyond national security professional education to tactical, operational, and strategic level planning, exercising, and execution in addressing the barriers to collaborative capacity.

Professional military education programs have increased the inclusion of interagency subject material over the past few years, but as identified in the literature review, the programs have not transitioned to include local and state perspectives. There is an increased awareness of the value of educating interagency personnel, but that extends only to federal interagency representatives.

Given that all disasters are local, it is essential for military personnel working inside the homeland to have experience with multi-disciplinary state and local homeland security professionals. First responders and state emergency management personnel will shape the environment, the requirements for assistance, and the inclusion of federal

capabilities into the disaster. Establishing strong relationships through joint education that can be used during the planning and exercising phases will improve the execution of prevention, response, or recovery.

Government Accounting Office (GAO) Report 09-849, *Homeland Defense U.S. Northern Command Has a Strong Exercise Program, but Involvement of Interagency Partners and States Can Be Improved* identified the linkage between relationships and integrated planning, training, and exercises:

There is an increasing realization within the federal government that an effective, seamless national response to an incident requires a strong partnership among federal, state, and local governments and organizations, including integrated planning, training, and the exercise of those plans. For DoD, the effective execution of civil support, especially amid simultaneous, multijurisdictional disasters, requires ever-closer working relationships with other departments and agencies and at all levels of government. (GAO, 2009, p. 58)

Additionally, Assistant Secretary of Defense for Homeland Defense and America's Security Affairs, Paul McHale testified before the Senate Committee on Homeland Security and Governmental Affairs, *Hurricane Katrina: The Defense Department's Role in the Response*, "The relationships between commanders, between human beings, between departments, in face-to-face confidence built on prior relationships, that is of enormous value in a crisis environment to cut through the paperwork and achieve decision making and operational deployment in an effective manner." (McHale, 2006, p. 26)

CHDS is designed to build interdisciplinary, multi-jurisdictional relationships aimed at broadening the perspectives of its participants. The education provides the mechanism to build collaborative capacity and encourages unity of effort in overcoming the challenges and barriers present in the homeland environment. The transformation that occurs through the CHDS master's degree program is evidenced by Bruce Martin, Fremont, California Fire Chief, expressing during the Capstone course, "After the last

18 months, I don't think of myself as a fire professional. I think of myself as something more. The rest of my work will be multi-dimensional." (personal communication between Chief Martin and the author)

V. CONCLUSIONS AND RECOMMENDATIONS

Hockey is a game filled with unpredictability and to a novice observer, it can appear to be chaos as the puck flies across the ice, bodies are checked against the boards, players sprawl out to block a shot, or when the fights end and a hockey game breaks out. Through the calamity, however, teams are structured and lines trade on and off the ice to keep fresh players skating, passing, defending, and shooting. The goalie works to protect the net from intruding pucks, releasing the puck to his teammates, and defense fluently transitions to offense for an unscripted period of time. Working, training, trusting, and sharing all combine in the chemistry of teamwork. The same unpredictability calmed by collaborative relationships is evident in the achievement of unity of effort involving educated homeland defense and homeland security professionals.

A. RATIONALE

A Panel Report of the Defense Science Board 2007 Summer Study on Challenges to Military Operations in Support of U.S. Interests titled *Unconventional Operational Concepts and the Homeland* summarized the need for professional development of the homeland defense and security enterprise with,

Forming a truly joint homeland security and defense team starts with developing leaders with a joint perspective—both through education and career experiences—building an interagency cadre of leaders, whose understanding of homeland defense transcends their immediate position. (DSB, 2009, pp. xiv and 47–48)

Additionally, in *National Security and the Interagency Process: Forward into the 21st Century*, author Gabriel Marcella proposes,

What is needed is a systematic effort to develop civilian and military cadres that are experts in interagency policy coordination, integration, and operations. (Marcella, 2000, p. 186)

Dr. Jim Wirtz, Dean of the School of International Graduate Studies at the Naval Postgraduate School, explains that CHDS offers the program to establish the expertise needed in today's homeland defense and security environment.

I think that's what we have created, it's that cadre of people that didn't exist before. They are the ones pushing forward in terms of fusion of data and sharing of information and breaking down barriers so we don't have the problems that plagued us on 9/11. It's really an informal group of people across the United States that will work together to solve problems. That's very positive for the country. (Seals, Arakawa & Kuska, 2010, p. 4)

This research began with an awareness that military education is transitioning to emphasize interagency cooperation in overseas environments. Military officers are participating in civil-military operations such as a comprehensive approach to stabilization and reconstruction, building partnership capacity, counterinsurgency, and humanitarian assistance along-side U.S. and international partners. The skill sets learned in coordinating and communicating with other governmental and non-governmental agencies, the private sector, and society have applicability to homeland defense, homeland security, and civil support.

Illustrated in the model below, unity of effort in homeland defense, homeland security, and civil support can be facilitated through a foundation of multi-disciplinary education. Using a shared learning environment involving stakeholders in homeland operations fosters a commonality and understanding of language and terminology; identification of roles, missions, authorities, responsibilities, capabilities, and gaps; information sharing and communication; interoperability; enhanced training, joint exercises, integrated plans, and synchronized execution of operations; building of relationships; and a collaborative capacity that maximizes the allocation of resources.

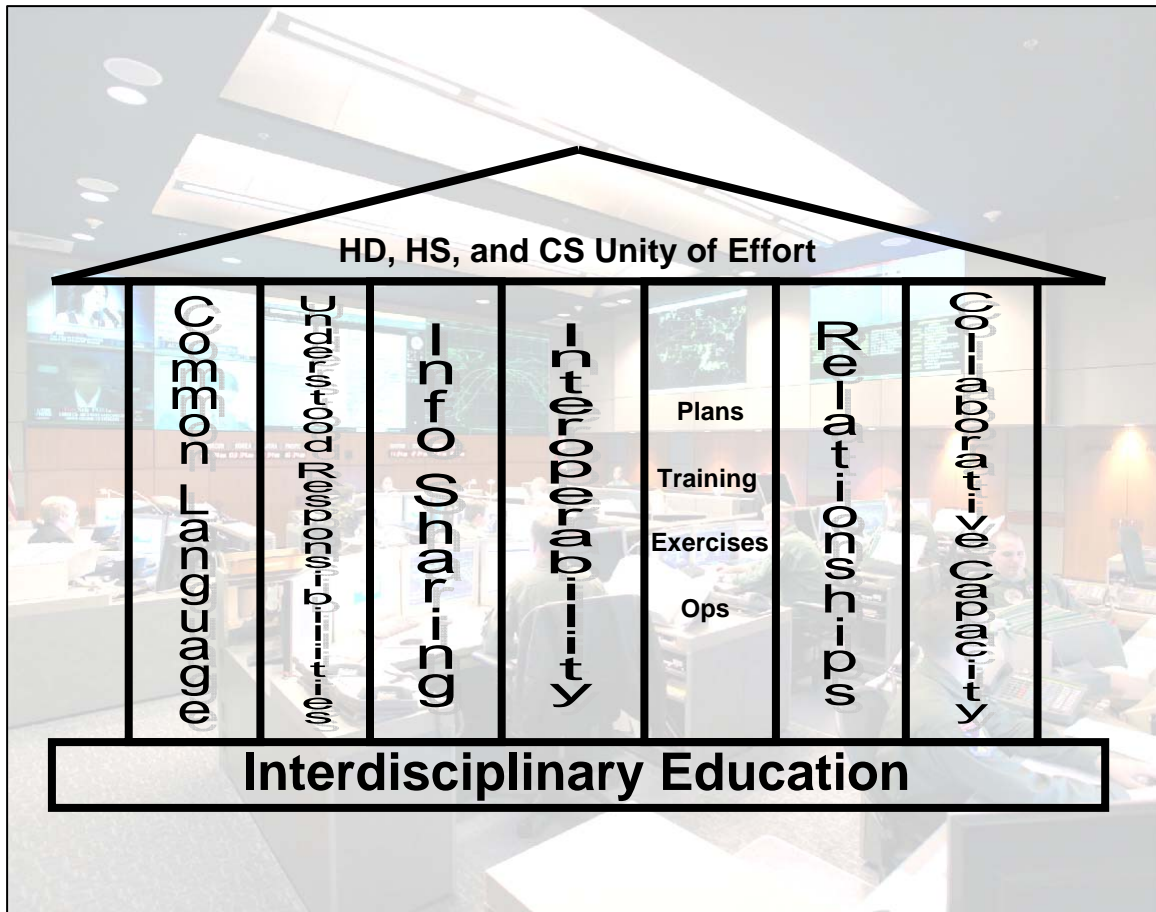


Figure 5. Model of Interdisciplinary Education as the Foundation of Unity of Effort

B. RECOMMENDATIONS

Improving the collaborative capacity of homeland defense and security professionals and consequently the capacity of their organizations has a direct impact upon the achievement of unity of effort. Educating practitioners at both leadership and grass roots levels will ensure the intrinsic nature of collaboration in departments and agencies responsible for sharing the burden of securing our nation and promoting resilience in the aftermath of disaster.

1. Collaboration as Part of the Culture

It is essential to have leadership that supports the elements of unity of effort, but more importantly, the concepts of collaboration must become ingrained in the culture of the organization. Sunil Desai, author of *Solving the Interagency Puzzle*, writes:

With a strong interagency culture the community will be far better able to coordinate among the agencies and with external organizations including state, local, and foreign governments; international organizations; nongovernmental organizations; academic institutions; and the private sector — which not only has a vested stake in America's security, but holds most of the resources necessary to protect it. Moreover, it will enable actual integrated operations, and not just improved coordination and cooperation. (Desai, 2005)

Personalities are important when facilitating interagency planning, training, exercising, and execution, but the successful accomplishment of unity of effort cannot be left to personalities who will inevitably transition out of key positions. The principles of unity of effort must be valued by homeland defense and security agencies and departments in order to promote successful collaborative endeavors.

A new way of leading in an interagency environment is necessary as Lt. Vinicio Mata, Sunnyvale Department of Public Safety asserted:

The way that homeland security is starting to be defined affects the kind of leadership that is needed. The fact that within the homeland security context there is interaction with different people that belong to organizations that have different structures, cultures, missions, and goals creates the need to for new leadership styles. They are called to influence and be influenced by others with fundamental different ways of looking at what we are trying to do in homeland security. The traditional ways to define leadership do not fit this new reality. (personal communication between Lt. Mata and author)

The skill sets developed through an interdisciplinary, multi-jurisdictional homeland defense and homeland security education program could be applied in meta-leadership roles. Leaders who are able to influence and coordinate planning, collaboration, and response efforts across multi-jurisdictional, multi-agency, and public-private organizations are termed “meta-leaders.”

These leaders connect with, influence, and integrate the activities of diverse agencies, extending what any unit alone could accomplish by reducing inter-agency friction and creating a synergy of progress. (Phillips & Loy, 2003, as described in 2005, Marcus, Dorn, & Henderson, p. 44)

Refinement of homeland defense and security meta-leadership characteristics could prove beneficial by identifying leadership traits that could be encouraged and developed to influence the future of the disciplines.

2. Impact Assessments Should Be Administered

The pre- and post-program assessments administered to CHDS participants should include the 19-item Readiness for Interprofessional Learning Scale (RIPLS) or the 18-item Interprofessional Education Perception Scale (IEPS) to measure students' attitudes and perceptions of multi-disciplinary teamwork and collaboration, professional identity, and roles and responsibilities. RIPLS and/or IEPS data is gathered and analyzed for numerous research projects regarding the contributions and challenges of shared learning environments in health care professional education. (Hawk, et. al, 2002; Horsburgh, Lamdin, & Williamson, 2001; Morison, Marley, Stevenson, & Milner, 2008; Salvatori, Berry, & Eva, 2007) Tracking the changes in knowledge, skills, and attitudes via RIPLS or IEPS data could quantitatively identify the benefits of the CHDS model to building collaborative capacity and enhancing unity of effort. This analysis would be useful in justifying the dedication of resources to the multi-disciplinary education approach in other educational venues.

3. Expand the CHDS Opportunity to Other Interagency Educational Programs

Applying the CHDS cohort model in DoD professional military education, fire and law enforcement academies, Department of State training, and other homeland defense and homeland security educational forums could fill the void from a lack of a National Security University. Affiliation with CHDS's UAPI and HSDECA will give sample curriculum and accreditation potential to the educational programs.

4. Incentives for Participation

Since incentives are identified as a key enabler to improving collaborative capacity, one such incentive could be tied to the congressionally proposed 2009 Roosevelt Scholars Act, which essentially creates a civilian Reserve Officer Training Corps (ROTC) by providing college scholarships in critical fields in exchange for a federal service commitment. (Dionne, 2009) The concept is patterned after the military's successful ROTC program where students receive scholarships based upon a commitment to serve in one of the branches of the armed forces upon graduation. Ideally, the Roosevelt Scholars program will incentivize talented young people to supply a critically needed workforce for the federal government.

In a military or civil servant capacity, government employees need to be aware of the benefits of multi-disciplinary and multi-jurisdictional efforts in the homeland. Collaborative capacity could be built by encouraging colleges accepting Roosevelt Scholarships to provide interprofessional education opportunities. Through UAPI affiliations, or medical professional interdisciplinary education programs, examples of shared learning environments and multi-disciplinary curricula are readily accessible. Establishing a generation of scholars accustomed to collaboration will have lasting dividends for our country.

5. Advance National Security Professional Development Through Interdisciplinary Education

One objective of the *Quadrennial Homeland Security Review* under the heading "Foster Unity of Effort" is to "Build a homeland security professional discipline: Develop the homeland security community of interest at all levels of government as part of a cadre of national security professionals." (QHSR, 2010, p. 36) Additionally, the *2010 Quadrennial Defense Review* advocates for the National Security Professional program:

One solution [for whole-of-government operations] is to allocate additional resources across the government and fully implement the National Security Professional (NSP) program to improve cross-agency training, education, and professional experience opportunities. This will

help foster a common approach to strategic and operational planning and implementation, improving prospects for success in future contingencies. (DoD, 2010, p. 71)

Expanding the National Security Professional Development program to include state and local partners could enable the multi-disciplinary, multi-jurisdictional education that is currently lacking beyond the Center for Homeland Defense and Security.

6. Identify Expertise

Tracking of personnel with homeland security professional expertise to facilitate follow-on or exchange assignments to build upon completed education and experience is an area for additional analysis. The *Department of Defense Civilian National Security Professional [NSP] Development Implementation Plan* discussed NDU's pilot program participants, stating,

The Chairman of the Joint Chiefs of Staff (CJCS) addressed a letter to the agencies of the 38 designated students requesting that the personnel offices consider assigning the graduates to positions where they would use this education. (DoD, 2008, p. 32)

C. AREAS TO CONSIDER

Obstacles associated with creating the National Security Professional program (funding, agency cultures, lack of a Congressional mandate similar to Goldwater-Nichols, and curriculum accreditation) have all been managed within the CHDS construct. However, one hurdle is embodied by the enlightenment revealed in Plato's *Allegory of the Cave*, which can be interpreted as once you have broadened your horizons, it is difficult to return to previous perspectives.

"The homeland security enterprise is characterized by high personnel turnover." (Heyman and Carafano, 2008, p. 18) Once individuals are exposed to the multi-disciplinary perspective of a national security professional, it may be difficult to find satisfaction with a single-discipline focus or the opportunities available in the current position of employment.

Some CHDS graduates will have their skills and accomplishments recognized with promotions or other advancement. Others may energize a larger revolution by sharing the experience of what they have learned to co-workers, friends, and unsuspecting audiences. As articulated by Major General Lowenberg, the capability of education as a force-multiplier cannot be underestimated. He observes,

[The Center] has benefitted us because the people who have participated have directly had their horizons expanded. That has had a collateral effect on the people around them. It bleeds off into the rest of the organization. (Seals, Arakawa & Kuska, 2010, p. 5)

As is always the case, the ability to implement any idea is contingent upon resource availability. Resources in the form of time, personnel, and money are limited and in high demand at all levels and across all disciplines. Key to the consideration of the multi-disciplinary education program is realizing the force-multiplying capacity resident in such an opportunity.

D. CONCLUSION: ONE FINAL HOCKEY ANALOGY

Dave Ogrian was the public relations director for USA Hockey during the 1980 Olympics; he now serves as USA Hockey's executive director. When referring to the U.S. victory over the Soviet team, Ogrian is quoted saying,

It's the most transcending moment in the history of our sport in this country. For people who were born between 1945 and 1955, they know where they were when John Kennedy was shot, when man walked on the moon, and when the USA beat the Soviet Union in Lake Placid. (Allen, 1997)

Another generation knows exactly where they were on September 11, 2001, when planes crashed into the World Trade Center towers, the Pentagon, and a field in rural Pennsylvania. *The 9/11 Commission Report* says,

That September day, we came together as a nation. The test before us is to sustain that unity of purpose and meet the challenges now confronting us. (9/11 Commission, 2004, p. xvi)

One way to address the 9/11 Commission's challenge is to expand the educational opportunities provided to military personnel and national security professionals to create an interdisciplinary, multi-jurisdictional culture. Addressing the country's challenge as an integrated team will lead to triumph over terrorism and natural disasters alike.

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